



TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE

MEETING MATERIALS

February 4, 2009

CALTRANS

BAY AREA TOLL AUTHORITY

CALIFORNIA TRANSPORTATION COMMISSION





Letter of Transmittal

TO: Toll Bridge Program Oversight Committee
(TBPOC)

DATE: January 26, 2009

FR: Program Management Team (PMT)

RE: TBPOC Meeting Materials Packet – February 4, 2009

Herewith is the TBPOC Meeting Materials Packet for the February 4th meeting. The packet includes memoranda and reports that will be presented at the meeting. A Table of Contents is provided following the Agenda to help locate specific topics.

TBPOC MEETING
February 4, 2009, 1:00 pm – 4:00 pm
Conference Room 1906, Mission Bay Office, 325 Burma Road, Oakland

Topic	Presenter	Time	Desired Outcome
1. CHAIR'S REPORT	W. Kempton, CT	5 min	Information
2. CONSENT CALENDAR			
a. January 20, 2008 Meeting Minutes*	A. Fremier, BATA	1 min	Approval
b. 2009 TBPOC Meeting Calendar*	A. Fremier, BATA	1 min	Information
c. Contract Change Orders (CCO's): 1) YBI Detour – CCO 144, S1 (East Tie-In Four Expansion Joints)*	D. Noel, CTC	5 min	Approval
3. PROGRESS REPORTS			
a. Draft January 2009 Monthly Progress Report**	A. Fremier, BATA	1 min	Information
b. Draft Fourth Quarter Report, December 31, 2008**	A. Fremier, BATA	1 min	Information
4. PROGRAM ISSUES			
a. TBSRP Capital Outlay Support (COS) Update*	A. Banani, CT P. Lee, BATA	15 min	Information
b. 2009 Legislative Update Draft Report*	B. Ney, CT	15 min	Information
c. Partnership with Google*	B. Ney, CT	15 min	Information
5. SAN FRANCISCO-OAKLAND BAY BRIDGE UPDATES			
a. Yerba Buena Island Detour (YBID) Update	T. Anziano, CT	5 min	Information
b. Self-Anchored Suspension (SAS) Superstructure 1) Mitigation and Acceleration Update*	A. Fremier, BATA/ M. Forner, CT/ T. Anziano, CT	30 min	Information
2) Contract Change Orders (CCO's) a) SAS – CCO 77, S1 (Green-Tagging Process)* b) SAS - CCO 91, S1 (Additional Non-Destructive Testing)*	D. Noel, CTC	5 min	Approval
3) Cable Fabrication/Installation Discussion	ABF	30 min	Information
6. OTHER BUSINESS	W. Kempton, CT		n/a

Next TBPOC Meeting: March 5, 2009, 1:00 pm – 4:00 pm
Director's Conference Room, 1120 N St., Sacramento, CA

*Attachments

**Stand-alone document included in the binder

TBPOC MEETING February 4, 2009

INDEX TAB	AGENDA ITEM	DESCRIPTION
1	1	CHAIR'S REPORT
2	2	CONSENT CALENDAR <ul style="list-style-type: none"> a. January 20, 2009 Meeting Minutes* b. 2009 TBPOC Meeting Calendar* c. Contract Change Orders (CCO's): <ul style="list-style-type: none"> 1) YBI Detour – CCO 144, S1 (East Tie-In Four Expansion Joints)*
3	3	PROGRESS REPORTS <ul style="list-style-type: none"> a. Draft January 2009 Monthly Progress Report** b. Draft Fourth Quarter Report, December 31, 2008**
4	4	PROGRAM ISSUES <ul style="list-style-type: none"> a. TBSRP Capital Outlay Support (COS) Update* b. 2009 Legislative Update Draft Report* c. Partnership with Google*
5	5	SAN FRANCISCO-OAKLAND BAY BRIDGE UPDATES <ul style="list-style-type: none"> a. Yerba Buena Island Detour (YBID) b. Self-Anchored Suspension (SAS) Superstructure <ul style="list-style-type: none"> 1) Mitigation and Acceleration Update* 2) Contract Change Orders (CCO's): <ul style="list-style-type: none"> a) SAS – CCO 77, S1 (Green-Tagging Process)* b) SAS – CCO 91 (Additional Non-Destructive Testing)* 3) Cable Fabrication/Installation Discussion
6	6	OTHER BUSINESS

*Attachments

**Stand-alone document included in the binder

ITEM 1: CHAIR'S REPORT

No Attachments

ITEM 2: CONSENT CALENDAR

- a. January 20, 2009 Meeting Minutes

Memorandum

TO: Toll Bridge Program Oversight Committee (TBPOC) **DATE:** January 26, 2009

FR: Andrew Fremier, Deputy Executive Director, BATA

RE: Agenda No. - 2a
Consent Calendar
Item- January 20, 2009 Meeting Minutes

Recommendation:
APPROVAL

Cost:
N/A

Schedule Impacts:
N/A

Discussion:
The Program Management Team has reviewed and requests TBPOC approval of the January 20, 2009 Meeting Minutes.

Attachment(s):
January 20, 2009 Meeting Minutes



TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION

MEETING MINUTES

January 20, 2009, 10:00 AM – 1:00 PM
MTC/BATA Offices, The Fishbowl Conference Room,
101 Eighth Street, Oakland

Attendees: TBPOC Members: Will Kempton Steve Heminger, and John Barna
PMT Members: Tony Anziano, Andrew Fremier, and Stephen Maller
Participants: Michele DiFrancia, Beatriz Lacson, Richard Land, Peter Lee,
Brian Maroney, Dina Noel, Bijan Sartipi, Jon Tapping, Ken Terpstra,
and Jason Weinstein

Convened: 10:02 AM

Items	Action
<p>1. CHAIR'S REPORT</p> <ul style="list-style-type: none">• Will Kempton, the Chair, officially opened the first TBPOC meeting of year 2009 and turned it over to John Barna who made the following announcement:<ul style="list-style-type: none">○ John Barna will be leaving the CTC and TBPOC at the end of February to pursue an opportunity with AECOM beginning March 2009.<ul style="list-style-type: none">➤ He indicated that he leaves with mixed emotions, that he has enjoyed working with the TBPOC and is grateful for the knowledge and experience gained in the process.➤ Andre Boutros, CTC Chief Delivery Officer, will act as Interim Director until a permanent replacement is identified.○ Will Kempton and Steve Heminger acknowledged John Barna's significant contributions to the Toll Bridge Program, noting that his counsel and input would be missed and that they look forward to continuing their positive	

(continued)

Items	Action
<p>relationship.</p> <ul style="list-style-type: none"> • Will Kempton gave an update on the State budget. ○ The State is getting close to a resolution on the budget crisis. ○ The lack of financing sources (i.e., long-term bonds and short-term loans) could suspend Proposition 1B projects, defer allocations for remaining projects, and has the potential impact of slowing down ongoing projects worth \$1.8 billion; non-Proposition 1B projects are expected to continue. ○ A meeting on the Pooled Money Investment Account was held on Friday, January 16, where it was decided to release \$650 million to cover the State through the February pay day. ○ If a budget is not approved by February 1st, the “spigot” is likely to be turned off entirely, including Proposition 1B work. ○ The Governor is committed to bringing \$1.2 billion of construction work to the Bay Area in 2009, which would create approximately 22,000 jobs. 	
<p>2. CONSENT CALENDAR</p> <ul style="list-style-type: none"> a. December 23, 2008 TBPOC Meeting Minutes <ul style="list-style-type: none"> • Andy Fremier presented, for TBPOC approval, the December 23, 2008 TBPOC Meeting Minutes. b. 2009 TBPOC Meeting Calendar <ul style="list-style-type: none"> • The 2009 TBPOC Meeting Calendar is in the process of being revised. ○ The March 5 Legislative Update/TBPOC Meeting may need to be rescheduled. c. The following West Approach Contract Change Orders (CCO's) 	<ul style="list-style-type: none"> • The TBPOC APPROVED the December 23, 2008 TBPOC Meeting Minutes

(continued)

Items	Action
<p>were presented for TBPOC approval:</p> <ol style="list-style-type: none"> 1) CCO 139-S1: \$1,196,708 for additional time extensions for delays on the West Approach project incurred from April 20, 2008 through November 20, 2008. 2) CCO 149-S2: \$150,226.60 for added stage construction required for the eastbound mainline roadway construction due to realignment of the ST6D line. 	<ul style="list-style-type: none"> • The TBPOC APPROVED the following items, as presented: <ul style="list-style-type: none"> ○ West Approach CCO 139-S1 (\$1,196,708) ○ West Approach CCO 149-S2 (\$150,226.60)
<p>3. PROGRESS REPORTS</p> <ol style="list-style-type: none"> a. December 2008 Monthly Progress Report <ul style="list-style-type: none"> • Andy Fremier reported that the PMT approved the December 2008 Monthly Progress Report, through delegated TBPOC authority, on January 6, 2009 and requested confirmation of this approval. b. Draft January 2009 Monthly Progress Report <ul style="list-style-type: none"> • Andy Fremier informed the TBPOC that the draft January 2009 Monthly Progress Report is in the process of being reviewed. As soon as updated expenditure data and the latest comments are incorporated, the final version will be approved by the PMT through delegated TBPOC authority. ○ Mail-out is scheduled for February 4, 2009. • It was noted that the next quarterly report (4th Quarter 2008) will be distributed next week for review. 	<ul style="list-style-type: none"> • The TBPOC confirmed APPROVAL of the December 2008 Monthly Progress Report through delegated authority to the PMT.
<p>4. PROGRAM ISSUES</p> <ol style="list-style-type: none"> a. Draft 3rd Quarter 2008 Program Risk Management Report (RMR) Update <ul style="list-style-type: none"> • Jon Tapping gave a presentation on 	<ul style="list-style-type: none"> • Include the logos of BATA,

(continued)

Items	Action
<p>“Q3 2008 TBPOC Risk Management Briefing” covering a summary of risk management (RM) activities during the 3rd Quarter 2008, including RM accomplishments, risk developments in the current quarter, risk response actions, RM summaries of the individual contracts, potential draw on program contingency, and outlook for the next quarter.</p> <p>Discussion/comments included:</p> <ul style="list-style-type: none">○ Steve Heminger cautioned about using the term “success” in connection with contracts like E2-T1, which may have been completed under the RM budget but encountered problems initially that caused a drain on resources.<ul style="list-style-type: none">➤ The question was raised as to whether the budgets for the individual contracts are being set too high.➤ It was suggested that these budgets might need to be reassessed.○ Continuing claims resolution on the West Approach contract will allow the project to close out without claims at the end of April 2009.○ For the SAS contract, the TBPOC was assured that the challenges on the Hinge K coordination are being evaluated; also, that the contract change orders approved to mitigate cost/schedule risks (green tag, tack weld, shop space) have been beneficial to risk management.○ The TBPOC expressed concern over the \$730M potential draw trend on program contingency.○ The SAS schedule risk drives the program RM cost. Schedule delays can result in cost increases	<p>CTC and the Department on the title page of all Program presentations.</p>

(continued)

Items	Action
<p>in time-related overhead (TRO), equipment, personnel, etc.</p> <ul style="list-style-type: none"> ➤ Corridor schedules are dependent on the SAS schedule. ➤ Developing an opportunity schedule in partnership with the Contractor is crucial to managing risk. ○ It was noted that an improved partnership between the TBPOC, design consultant, and contractor for the SAS contract would be an effective way of reducing risk. <p>b. 2009 Legislative Update Draft Report Update</p> <ul style="list-style-type: none"> • Tony Anziano provided the status of the report and requested TBPOC guidance on the following: <ul style="list-style-type: none"> ○ The need for a separate report for the Legislature, or would the 4th Quarter Report suffice. ○ The need for a Legislative Update and if so, where should it be held – Sacramento or the Bay Area. <ul style="list-style-type: none"> ➤ It was the consensus that a comprehensive legislative briefing is important. ➤ If the Bay Area Caucus attracts a larger legislative attendance as it has in the past, the briefing ought to coincide with it. • The TBPOC suggested that a legislative tour of the project would be very beneficial, and the sooner the better. 	<ul style="list-style-type: none"> • The TBPOC agreed that the format of the Legislative Update Report could be revised to be as efficient as possible as determined by the Communications Partnership Team (CPT). This could include using the 4th Quarter Report in its place. • Schedule a legislative tour of the project and give an update at Pier 7 with a presentation of the draft 4th Quarter 2008 Report.
<p>5. SAN FRANCISCO-OAKLAND BAY BRIDGE UPDATES</p> <p>c. Self-Anchored Suspension (SAS) Superstructure</p> <p>1) TBPOC/ABF Mitigation and Acceleration Update</p>	

(continued)

Items	Action
<ul style="list-style-type: none">• Andy Fremier gave an update on the topics discussed at the December 2008 TBPOC/ABF Partnering Session. Discussion/comments included:<ul style="list-style-type: none">○ The Department's Legal Counsel is working on options to remove any contractual impediments to a full partnership.➤ Such a positive working relationship would provide a more timely resolution of design/shop drawing/fabrication issues.○ The TBPOC and ABF have agreed to fund the ZPMC schedule mitigation proposal to accelerate shipments of the bridge components at a 50/50 split. Upon ZPMC sign-off, ABF and the Department will request final TBPOC approval of the proposal based on the 50/50 split commitment.○ Efforts to resolve known fabrication issues continue. A tentative settlement proposal will be presented to the TBPOC at the February 4, 2009 meeting.○ Ken Terpstra reported that ABF and the PMT and Department members are meeting tomorrow to develop a joint opportunity schedule.➤ Steve Heminger stressed the need for one schedule, as opposed to the current three schedules.➤ Will Kempton will talk to Bob Luffy (ABF) before the April meeting, to let him know that the TBPOC is moving in the right direction on this item.○ The SAS Fabrication Status as	<ul style="list-style-type: none">• The TBPOC and PMT to convene prior to February 4, 2009 to prepare for the meeting with ABF.• Staff to report monthly to the

(continued)

Items	Action
<p>of Dec 26, 2008 was reviewed and discussed.</p> <ul style="list-style-type: none">○ It was noted that the new inspection consultant is now on board and operating efficiently.• On the barge crane issue, it is important to keep the line of communication open.<ul style="list-style-type: none">○ TBPOC support is needed. <p>b. Yerba Buena Island Detour (YBID)</p> <p>1) Update</p> <ul style="list-style-type: none">• Dan Himick of CCM will update the TBPOC on the bridge closure for the East Tie-In (ETI) Roll-Out/Roll-In (RO/RI) on February 4.<ul style="list-style-type: none">○ The team believes the project is on track for a Labor Day bridge closure, but CCM might need more time to make its final decision, with the back-up plan of the RO/RI occurring in October. <p>c. Oakland Touchdown No. 1</p> <p>1) Update</p> <ul style="list-style-type: none">• Tony Anziano reported that progress on the project is going well.<ul style="list-style-type: none">○ The contractor MCM had a very positive meeting with CalOSHA recently. <p>d. Gateway Park Area (GPA)</p> <p>1) Update</p> <ul style="list-style-type: none">• Stephen Maller gave an update on recent activities:<ul style="list-style-type: none">○ Visioning Conference II is set for February 4, 2009. It will provide decision makers an update on related activities since the first conference. It aims to reach a consensus on the proposed geographic	<p>TBPOC on the SAS Fabrication Status and illustrate progress using the graphic.</p>

(continued)

Items	Action
<p>scope and next steps.</p> <ul style="list-style-type: none">○ A scoping document, referred to as the Gateway Project Study Report (GPSR), is being developed by the Working Group with BATA as contract manager, and the estimated cost of \$1M to be potentially funded by the members of the Working Group.➤ Scaling back to areas within the Program's control was suggested, while maintaining an expansive vision.○ The Department and City of Oakland are negotiating on the proposed land swap, and working toward finalizing the Maintenance Complex land transaction.	
<p>8 OTHER BUSINESS</p> <ul style="list-style-type: none">• Will Kempton, the Chair, thanked the team for past year's efforts and moving forward with the project challenges. He noted the incredible improvement in program management compared to when it first started, and how the public is well served by it.	

Adjourned: 12:47 PM

(continued)

MEETING MINUTES

January 20, 2009, 10:00 AM – 1:00 PM
MTC/BATA Offices, The Fishbowl Conference Room,
101 Eighth Street, Oakland

APPROVED BY:

WILL KEMPTON, Director
California Department of Transportation

Date

JOHN F. BARNA, Jr., Executive Director
California Transportation Commission

Date

STEVE HEMINGER, Executive Director
Bay Area Toll Authority

Date

ITEM 2: CONSENT CALENDAR

b. 2009 TBPOC Meeting Calendar

Memorandum

TO: Toll Bridge Program Oversight Committee (TBPOC) **DATE:** January 26, 2009

FR: Andrew Fremier, Deputy Executive Director, BATA

RE: Agenda No. - 2b

Item- Consent Calendar
2009 TBPOC Meeting Calendar

Recommendation:

For Information Only

Cost:

N/A

Schedule Impacts:

N/A

Discussion:

This is to inform you that the attached 2009 TBPOC Meeting Calendar has been revised to re-instate the March 5 TBPOC Meeting in Sacramento. The Legislative Update, originally scheduled for March 5 is being re-scheduled to coincide with the Bay Area Caucus.

Attachment:

2009 TBPOC Meeting Calendar (as of February 4, 2009)

2009 TBPOC Meeting Calendar
(as of February 4, 2009)

Rev. 02/04/09

Jan-09				
MON	TUE	WED	THU	FRI
			HOLIDAY	
			1	2
PMT		CTC	CTC	
5	6	7	8	9
PMT		BATA OC		
12	13	14	15	16
HOLIDAY	TBPOC			
19	20	21	22	23
PMT		MTG		
26	27	28	29	30

1 - New Years Day Observed
19 - M L King Jr's Birthday

Feb-09				
MON	TUE	WED	THU	FRI
PMT		Vis Conf TBPOC		
2	3	Bay 4	5	6
PMT	4 Final	4 Leg BATA OC	HOLIDAY	
9	10	11	12	13
Holiday	PMT	CTC	CTC	
16	17	18	19	20
PMT		MTG		
23	24	25	26	27

12 - Lincoln's Birthday
16 - Washington's Birthday

Mar-09				
MON	TUE	WED	THU	FRI
PMT			TBPOC	
2	3	4	Sac 5	6
PMT		BATA OC	CTC	
9	10	CTC 11	12	13
PMT				
16	17	18	19	20
PMT		MTG		
23	24	25	26	27
PMT	HOLIDAY			
30	31			

31 - Cesar Chavez's Birthday

Apr-09				
MON	TUE	WED	THU	FRI
			TBPOC	
		1	2	3
PMT		BATA OC	CTC	
6	7	8	9	10
PMT				
13	14	15	16	17
PMT		MTG		
20	21	22	23	24
PMT				
27	28	29	30	

May-09				
MON	TUE	WED	THU	FRI
				1
PMT			TBPOC	1 Final
4	5	6	Bay 7	8
1 Leg		BATA OC	CTC	
PMT		CTC	CTC	
11	12	13	14	15
PMT				
18	19	20	21	22
HOLIDAY	PMT	MTG		
25	26	27	28	29

25 - Memorial Day

Jun-09				
MON	TUE	WED	THU	FRI
PMT			TBPOC	
1	2	3	Sac 4	5
PMT		BATA OC	CTC	
8	9	10	11	12
PMT				
15	16	17	18	19
PMT		MTG		
22	23	24	25	26
PMT				
29	30			

Jul-09				
MON	TUE	WED	THU	FRI
			TBPOC	
		1	Bay 2	HOLIDAY
				3
PMT		BATA OC	CTC	
6	7	8	9	10
PMT				
13	14	15	16	17
PMT		MTG		
20	21	22	23	24
PMT				
27	28	29	30	31

3 - Day before Independence Day

Aug-09				
MON	TUE	WED	THU	FRI
PMT			TBPOC	
3	4	5	Bay 6	7
PMT				
11	11	2 Leg	CTC	
		3 Final	CTC	
17	18	19	20	21
PMT				
24	25	26	27	28
PMT				
31				

Sep-09				
MON	TUE	WED	THU	FRI
			TBPOC	
		1	2	
			Sac 3	4
HOLIDAY	PMT	BATA OC	CTC	
7	8	9	10	11
PMT				
14	15	16	17	18
PMT		MTG		
21	22	23	24	25
PMT				
28	29	30		

7 - Labor Day

Oct-09				
MON	TUE	WED	THU	FRI
			TBPOC	
			1	2
PMT		CTC	CTC	
5	6	7	8	9
HOLIDAY	PMT	BATA OC		
12	13	14	15	16
PMT				
19	20	21	22	23
PMT		MTG		
26	27	28	29	30

12 - Columbus Day

Nov-09				
MON	TUE	WED	THU	FRI
PMT			TBPOC	
2	3	4	Bay 5	6
PMT				
9	10	3 Final	3 Leg	
		HOLIDAY		
16	17	BATA OC	CTC	
		CTC 18	19	20
PMT		MTG	HOLIDAY	HOLIDAY
23	24	25	26	27
PMT				
30				

11 - Veteran's Day
26, 27 - Thanksgiving Day and day after

Dec-09				
MON	TUE	WED	THU	FRI
			TBPOC	
		1	2	
			Sac 3	4
PMT		BATA OC	CTC	
7	8	9	10	11
PMT		MTG		
14	15	16	17	18
PMT				
21	22	23	24	HOLIDAY
25				
PMT				
28	29	30	31	

25 - Christmas Day observed

	Qtrly Rept Schedule
Final	TBPOC Final Comments
Leg	Issue to Legislature

PMT Meetings in Oakland, 1:00 PM - 2:30 PM
TBPOC Meetings in Sacramento, 1:00 PM - 4:00 PM
TBPOC Mtgs in Bay Area, 10AM - 1PM (except Feb 4, 10AM - 4PM, incl Visioning Conf)

ITEM 2: CONSENT CALENDAR

c. Contract Change Orders (CCO's)

- 1) YBI Detour – CCO 144, S1 (East Tie-In Four
Expansion Joints)

Memorandum

TO: Toll Bridge Program Oversight Committee (TBPOC) **DATE:** January 26, 2009

FR: Tony Anziano, Toll Bridge Program Manager, Caltrans

RE: Agenda No. - 2c1
Item- Consent Calendar
Contract Change Orders (CCO's)
YBI Detour – CCO 144, S1

Recommendation:
APPROVAL

Cost:
CCO 144 - Supplemental 1: \$2,900,000.00

Schedule Impacts:
N/A

Discussion:

Contract Change Order 144 - Supplemental 1 in the amount of \$2,900,000 covers all costs involved in furnishing, fabricating, machining, prime painting and delivery of the expansion joints to be used on the Yerba Buena Island Detour east tie-in segment. The original CCO 144 compensated the contractor for costs incurred to procure materials and construct a mock-up of the required expansion joints at an estimated cost of \$850,000.000. This supplemental CCO will be funded through the available contingency balance and paid as extra work at force account as amended into contract under special provisions.

Attachment(s):

1. Draft CCO 144 S1
2. Draft CCO 144 S1 Memorandum
3. Approved CCO 144
4. YBI Detour CCO Implementation Strategy

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO 144	Suppl. No. 1	Contract No. 04 - 0120R4	Road SF-80-12.6/13.2	FED. AID LOC.: ACBRIM-080-1(097)N
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To: CC MYERS INC

You are directed to make the following changes from the plans and specifications or do the following described work not included in the plans and specifications for this contract. **NOTE: This change order is not effective until approved by the Engineer.**

Description of work to be done, estimate of quantities and prices to be paid. (Segregate between additional work at contract price, agreed price and force account.) Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. This last percentage shown is the net accumulated increase or decrease from the original quantity in the Engineer's Estimate.

Extra Work at Force Account:

Furnish, fabricate, machine, prime paint, and deliver to the project site, East Tie In expansion joints in accordance with the plans and specifications dated May 12, 2008 included herein (Sheets 2 through 23).

Payment for this work shall be in accordance with Sections 4-1.03D, Extra Work, and 9-1.03, Force Account Payment, of the Standard Specifications.

Compensation for delays resulting from this work will be made in accordance with Section 8-1.09 "Right of Way Delays" of the Standard Specifications and Section 10-1.20 "Time Related Overhead" of the Special Provisions.

Consideration of a time adjustment will be deferred until completion of the work specified herein. Determination of a commensurate time extension will be made in accordance with Section 8-1.07, "Liquidated Damages", of the Standard Specifications.

Estimated Cost of Extra Work at Force Account\$2,900,000.00

Estimated Cost: Increase ☒ Decrease ☐ \$2,900,000.00

By reason of this order the time of completion will be adjusted as follows: Deferred

Submitted by

Signature	Resident Engineer BILL CASEY	Date
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Approval Recommended by

Signature	SFOBB Construction Manager MIKE FORNER	Date
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Engineer Approval by

Signature	SFOBB Construction Manager MIKE FORNER	Date
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We the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as may otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment therefor the prices shown above.

NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specifications as to proceeding with the ordered work and filing a written protest within the time therein specified.

Contractor Acceptance by

Signature	(Print name and title)	Date
-----------	------------------------	------

CONTRACT CHANGE ORDER MEMORANDUM

DATE: 1/22/2009 Page 1 of 2

TO: MIKE FORNER / DEANNA VILCHECK			FILE: E.A. 04 - 0120R4	
FROM: BILL CASEY			CO-RTE-PM SF-80-12.6/13.2	
			FED. NO. ACBRIM-080-1(097)N	
CCO#: 144	SUPPLEMENT#: 1	Category Code: CHPA	CONTINGENCY BALANCE (incl. this change) \$72,297,134.05	
COST: \$2,900,000.00 INCREASE <input checked="" type="checkbox"/> DECREASE <input type="checkbox"/>			HEADQUARTERS APPROVAL REQUIRED? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
SUPPLEMENTAL FUNDS PROVIDED: \$0.00			IS THIS REQUEST IN ACCORDANCE WITH ENVIRONMENTAL DOCUMENTS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
CCO DESCRIPTION: ETI Fabricate Expansion Joints			PROJECT DESCRIPTION: CONSTRUCT ROUTE 80 TEMP BYPASS STRUCTURE	
Original Contract Time: 475 Day(s)	Time Adj. This Change: DEF Day(s)	Previously Approved CCO Time Adjustments: 1195 Day(s)	Percentage Time Adjusted: (including this change) 252 %	Total # of Unreconciled Deferred Time CCO(s): (including this change) 8

THIS CHANGE ORDER PROVIDES FOR:

compensation to the contractor for all costs involved in furnishing, fabricating, machining, prime painting, and delivering to the project site, East Tie In expansion joints.

This contract provides for the construction of a temporary detour for both eastbound and westbound I-80 traffic that allows for the tie in of the east span of the new San Francisco Oakland Bay Bridge (SFOBB) to Yerba Buena Island. The detour will allow for the construction of the permanent structure, the Yerba Buena Island Transition Structure, which connects the signature SAS structure to Yerba Buena Island.

The detour consist of three main structures, the East Tie-In (ETI) to the bridge, the West Tie-In to the island and the Viaduct structure between the two tie ins. The contract was awarded as a performance based project with the contractor responsible for meeting the design criteria specified in the contract.

A December 14, 2006 Department strategy memorandum, approved by Tony Anziano, Toll Bridge Program Manager, and Richard Land, Chief Engineer, recommended that the Department assume the design responsibility for the East Tie-In (ETI) structure. Based on this memorandum, the design of the structure was changed from a design that incorporated the existing steel truss bridge with the new structure to a design that replaces the existing structure with a new structure (roll out / roll in).

The new ETI design requires the fabrication and installation of 4 expansion joints, each approximately 18 meters long and 3 meters wide, where the upper and lower decks conform to the Viaduct structure and the existing SFOBB. These 4 joints need to be installed during the anticipated full weekend closure of the SFOBB when the existing span is rolled out and the new detour span is rolled in. This makes the installation of the expansion joints critical in avoiding a late opening of the weekend closure. The original CCO 144-S0 provided for the early procurement of the steel plate material required for the fabrication of the 4 expansion joints.

This work will be paid for as Extra Work at Force for an estimated cost of \$2,900,000.00 which will be funded through the available contingency balance. A cost analysis is on file.

Adjustment of contract time is deferred pending completion of the work specified in this change as it may become the controlling operation in accordance with Section 8-1.07 "Liquidated Damages", of the Standard Specifications and Section 10-1.20 "Time Related Overhead (TRO)" of the Special Provisions.

Compensation for delays resulting from this work will be made in accordance with Section 8-1.09 "Right of Way Delays" of the Standard Specifications and Section 10-1.20 "Time Related Overhead" of the Special Provisions.

This change was requested by Mike Whiteside - YBI Coordination Engineer per memorandum dated May 13, 2008 and concurred by Hong Wong - Project Engineer, Alec Melkonians - Asst. Project Manager, and Lina Ellis - Structure Maintenance.

CONTRACT CHANGE ORDER MEMORANDUM

EA: 0120R4 CCO: 144 - 1

DATE: 1/22/2009

Page 2 of 2

CONCURRED BY:			ESTIMATE OF COST		
Construction Engineer:	Bill Casey, Resident Engineer	Date		THIS REQUEST	TOTAL TO DATE
Bridge Engineer:	Mike Whiteside, Toll Bridge Design	Date 5/13/08	ITEMS	\$0.00	\$0.00
Project Engineer:	Hong Wong, PE	Date	FORCE ACCOUNT	\$2,900,000.00	\$3,750,000.00
Project Manager:	Alec Melkonians	Date	AGREED PRICE	\$0.00	\$0.00
FHWA Rep.:		Date	ADJUSTMENT	\$0.00	\$0.00
Environmental:		Date	TOTAL	\$2,900,000.00	\$3,750,000.00
Other (specify):	Patrick Treacy, HQ Asst.Const.Co	Date	FEDERAL PARTICIPATION		
Other (specify):	Lina Ellis, Struc. Maintenance	Date	<input type="checkbox"/> PARTICIPATING <input type="checkbox"/> PARTICIPATING IN PART <input type="checkbox"/> NONE <input type="checkbox"/> NON-PARTICIPATING (MAINTENANCE) <input checked="" type="checkbox"/> NON-PARTICIPATING		
District Prior Approval By:		Date	FEDERAL SEGREGATION (if more than one Funding Source or P.I.P. type) <input type="checkbox"/> CCO FUNDED PER CONTRACT <input type="checkbox"/> CCO FUNDED AS FOLLOWS		
HQ (Issue Approve) By:	Bob Molera, HQ CCO Engineer	Date	FEDERAL FUNDING SOURCE PERCENT _____ _____ _____		
Resident Engineer's Signature:		Date			

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO 144	Suppl. No. 0	Contract No. 04 - 0120R4	Road SF-80-12.6/13.2	FED. AID LOC.: ACBRIM-080-1(097)N
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To: CC MYERS INC

You are directed to make the following changes from the plans and specifications or do the following described work not included in the plans and specifications for this contract. **NOTE: This change order is not effective until approved by the Engineer.**

Description of work to be done, estimate of quantities and prices to be paid. (Segregate between additional work at contract price, agreed price and force account.) Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. This last percentage shown is the net accumulated increase or decrease from the original quantity in the Engineer's Estimate.

Extra Work at Force Account:

Perform the following work concerning the construction of the East Tie-In expansion joints of this change order:

- 1) Procure all material for the deck panels, masonry plate and bearing plate for the Bent 52A and Pier E1 expansion joints in accordance with Sheets No. 9 through 30 and as authorized by the Engineer.
- 2) Provide all labor, equipment and materials to construct the expansion joint mock up as shown on Pages No. 2 through 8 of this change order and as authorized by the Engineer.

The plan sheets and specifications provided under this change order (Sheets 9 through 16) shall be used solely for the procurement of materials and construction of the expansion joint mock up as determined by the Engineer. Final plans and specifications shall be issued under a separate change order providing for the final fabrication and installation of the expansion joints.

Any salvage value or disposal costs associated with the materials procured under this change order are deferred.

Compensation for delays resulting from this work will be made in accordance with Section 8-1.09 "Right of Way Delays" of the Standard Specifications and Section 10-1.20 "Time Related Overhead" of the Special Provisions.


Consideration of a time adjustment will be deferred until completion of the work specified herein. Determination of a commensurate time extension will be made in accordance with Section 8-1.07, "Liquidated Damages", of the Standard Specifications.

Estimated Cost of Extra Work at Force Account\$850,000.00

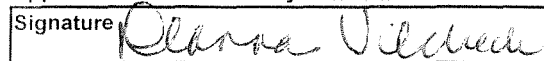
Estimated Cost: Increase ☒ Decrease ☐ \$850,000.00

By reason of this order the time of completion will be adjusted as follows: Deferred

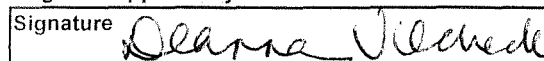
Submitted by

Signature 	Resident Engineer BILL CASEY	Date 8-18-08
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Approval Recommended by

Signature 	Area Construction Manager DEANNA VILCHECK	Date 8/25/08
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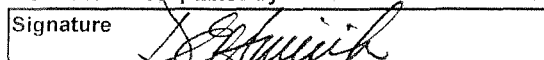
Engineer Approval by

Signature 	Area Construction Manager DEANNA VILCHECK	Date 9/12/08
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We the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as may otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment therefor the prices shown above.

NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specifications as to proceeding with the ordered work and filing a written protest within the time therein specified.

Contractor Acceptance by

Signature 	(Print name and title) DANIEL E. AMICK, President	Date 9/10/08
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CONTRACT CHANGE ORDER MEMORANDUM

TO: MIKE FORNER / DEANNA VILCHECK			FILE: E.A. 04 - 0120R4	
FROM: BILL CASEY			CO-RTE-PM SF-80-12.6/13.2	
			FED. NO. ACBRIM-080-1(097)N	
CCO#: 144	SUPPLEMENT#: 0	Category Code: CHPA	CONTINGENCY BALANCE (incl. this change) \$9,635,424.12	
COST: \$850,000.00		INCREASE <input checked="" type="checkbox"/> DECREASE <input type="checkbox"/>	HEADQUARTERS APPROVAL REQUIRED? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
SUPPLEMENTAL FUNDS PROVIDED: \$0.00		IS THIS REQUEST IN ACCORDANCE WITH ENVIRONMENTAL DOCUMENTS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		
CCO DESCRIPTION: Expansion Joint Mock Up			PROJECT DESCRIPTION: CONSTRUCT ROUTE 80 TEMP BYPASS STRUCTURE	
Original Contract Time: 475 Day(s)	Time Adj. This Change: DEF Day(s)	Previously Approved CCO Time Adjustments: 1195 Day(s)	Percentage Time Adjusted: (including this change) 252 %	Total # of Unreconciled Deferred Time CCO(s): (including this change) 8

THIS CHANGE ORDER PROVIDES FOR:

The early procurement of long lead time steel plate material and the construction of a mock up expansion joint for the East Tie-In (ETI) structure in order to avoid potential delay to the contract completion.

This contract provides for the construction of a temporary detour for both eastbound and westbound I-80 traffic that allows for the tie in of the east span of the new San Francisco Oakland Bay Bridge (SFOBB) to Yerba Buena Island. The detour will allow for the construction of the permanent structure, the Yerba Buena Interim Transition Structure, which connects the signature SAS structure to Yerba Buena Island.

The detour consist of three main structures, the East Tie-In (ETI) to the bridge, the West Tie-In to the island and the viaduct structure between the two tie ins. The contract was awarded as a performance based project with the contractor responsible for meeting the design criteria specified in the contract.

A December 14, 2006 Department strategy memorandum, approved by Tony Anziano, Toll Bridge Program Manager, and Richard Land, Chief Engineer, recommended that the Department assume the design responsibility for the East Tie-In (ETI) structure. Based on this memorandum, the design of the structure was changed from a design that incorporated the existing steel truss bridge with the new structure to a design that replaces the existing structure with a new structure (roll out / roll in).

The new ETI design requires the fabrication and installation of 4 expansion joints, each approximately 18 meters long and 3 meters wide, where the upper and lower decks conform to the Viaduct structure and the existing SFOBB. These 4 joints need to be installed during the anticipated full weekend closure of the SFOBB when the existing span is rolled out and the new detour span is rolled in. This makes the installation of the expansion joints critical in avoiding a late opening of the weekend closure. The initial design of the expansion joints is now completed but it has been requested that a mock up of the joints be constructed in order to identify any potential conflicts with their installation. This change order provides for the construction of this mock up. Mock up design plans are not stamped as this structure will not be used.

This change order also provides for the early procurement of the steel plate required for the fabrication of the 4 expansion joints. These materials shall be procured prior to the completion of the final design in order to avoid delaying the fabrication which is currently a near critical operation on the project. A separate change order shall be issued to provide for the actual fabrication and installation of the skid bents once the design is finalized.

Based on a CPM analysis of the project schedule, failure to provide for this early procurement could delay the completion of this contract and potential delay the entire SFOBB corridor.

The work shall be performed as extra work at force account at an estimated cost of \$850,000.00 and shall be financed from the contract's contingency funds. A cost analysis is on file.

Adjustment of contract time is deferred as the work may affect the controlling operation.

This change was requested by Mike Whiteside - YBI Coordination Engineer per memorandum dated May 20, 2008 and concurred by Hong Wong - Project Engineer and Alec Melkonians - Project Manager.

CONTRACT CHANGE ORDER MEMORANDUM

EA: 0120R4 CCO: 144 - 0

DATE: 8/4/2008

Page 2 of 2

Maintenance concurrence is not required as this change order only acts to procure long lead time materials. Concurrence shall be obtained under the change order that provides for the construction of the ETI structure.

CONCURRED BY:			ESTIMATE OF COST		
Construction Engineer:	Bill Casey, Resident Engineer	Date <u>8-19-08</u>	THIS REQUEST		TOTAL TO DATE
Bridge Engineer:		Date	ITEMS	\$0.00	\$0.00
Project Engineer:	Hong Wong, PE	Date 8/11/08	FORCE ACCOUNT	\$850,000.00	\$850,000.00
Project Manager:	Alec Melkonians	Date 8/12/08	AGREED PRICE	\$0.00	\$0.00
FHWA Rep.:		Date	ADJUSTMENT	\$0.00	\$0.00
Environmental:		Date	TOTAL	\$850,000.00	\$850,000.00
Other (specify):	Mike Whiteside, Toll Bridge Design	Date 5/20/08	FEDERAL PARTICIPATION		
Other (specify):		Date	<input type="checkbox"/> PARTICIPATING <input type="checkbox"/> PARTICIPATING IN PART <input type="checkbox"/> NONE <input type="checkbox"/> NON-PARTICIPATING (MAINTENANCE) <input checked="" type="checkbox"/> NON-PARTICIPATING		
District Prior Approval By:		Date	FEDERAL SEGREGATION (if more than one Funding Source or P.I.P. type)		
HQ (Issue Approve) By:	Ken Darby, HQ CCO Engineer	Date <u>8/26/08</u>	<input type="checkbox"/> CCO FUNDED PER CONTRACT <input type="checkbox"/> CCO FUNDED AS FOLLOWS		
Resident Engineer's Signature:		Date	FEDERAL FUNDING SOURCE PERCENT		

[Signature] 8-19-08

South-South Detour, Contract No. 04-0120R4
Contract Change Order Implementation Strategy
February 4, 2009

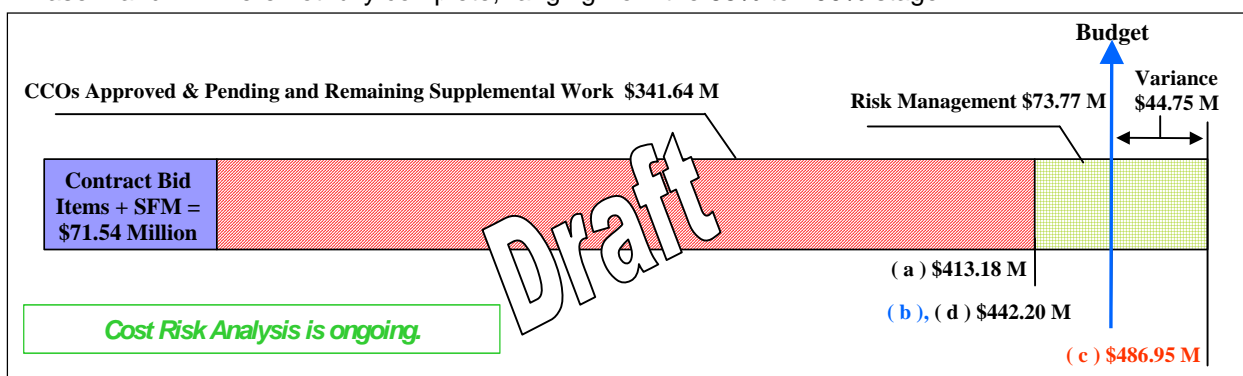
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South-South Detour (Contract 04-0120R4)			
Contract Award:	March 10 th , 2004	Suspension Days:	302 Working Days
Original Working Days:	475 Working Days	Contract Extensions:	1195 Working Days
Original Contract Completion:	July 27th, 2005	Projected Contract Completion:	April 30, 2010

Introduction

Two memos were developed to outline a strategy for a revised SSD project that enhanced SSD viaduct design, developed tie-in design (east and west) in-house, improved the retrofit of the YBI viaduct (replacing the top deck of the viaduct rather than retrofitting in place) and advanced and incorporated select YBITS foundation work. The two memos are "San Francisco-Oakland Bay Bridge Corridor Schedule Mitigation – Strategy for South-South Detour Contract Completion" issued December 14, 2006, and "Recommendation to Construct Select Yerba Buena Island Transition Structure Foundations by Contract Change Order" issued on December 25, 2006. This strategy will result in substantial increases in the cost of the SSD project.

As approved at the March 2008 TBPOC meeting the revised budget for the SSD Project is 442.2M. This figure was established using available information as of January 2008 noting that the plans and specifications for the WTI Phase 2 and ETI were not fully complete, ranging from the 65% to 100% stage.



Scope of Work for SSD

The revisions to the original scope of work currently associated with the South-South Detour Project have been assigned into the following categories with their associated estimated cost:

Category	Scope of Work	Current Budget (March 2008)	In Progress Status Update from March 08 Approved Budget	
			Current	Delta
(0)	Original Bid Items, Baseline CCOs (1 through 48), and State Furnished Materials	\$83.7	\$83.7	\$0
(1)	SSD New Viaduct	\$31.9	\$35.6	\$3.7
(2a)	West Tie-In Existing Viaduct Phase 1	\$39.6	\$40.1	\$0.5
(2b)	West Tie-In Phase 2	\$15.0	\$21.4	\$6.4
(3)	East Tie-In	\$72.5	\$104.4	\$31.9
(4)	YBI Transition Structures Advance Foundations	\$105.8	\$102.8	(\$3.0)
(5)	Administrative Issues and General CCOs	\$48.6	\$51.3	\$2.7
Subtotal		\$397.1	\$439.3	\$42.2
Contingency		\$45.1	\$2.9	
Approved Budget		\$442.2		

Contract payments as of January 20, 2008: \$283.9M

As shown, the current status of CCOs required to modify the original scope of the SSD work as defined in Categories 1 through 5 is \$355.6M. The status of each category of work is discussed in the succeeding pages of this report.

South-South Detour, Contract No. 04-0120R4
Contract Change Order Implementation Strategy
February 4, 2009

DRAFT

Bid Items, Baseline CCOs, & State Furnished Material

0

The break down of Category (0) is as follows:

Original Contract Amount	\$ 71.2 million
Baseline CCOs (1 through 48)	\$ 12.1 million
State Furnished Materials	\$ 0.4 million
Total	\$ 83.7 million

Baseline Contract Change Orders (1 through 48)

CCO #	Description	Executed Date	Cost
1	Flagging and Traffic Control	5/13/2004	\$100,000.00
1S1	Additional Funds for Flagging and Traffic Control	2/9/2007	\$200,000.00
2	Bidder Compensation	5/8/2004	\$1,575,000.00
3	Partnering	9/7/2004	\$25,000.00
4	DRB	9/7/2004	\$100,000.00
5	Federal Trainee Program	11/12/2004	\$20,000.00
5S1	Non-Journey Person Training	3/10/2005	\$50,000.00
6	Removal of DBE/SBE Monitoring	2/10/2005	\$0.00
7	Sampling and Analysis Work	8/30/2004	\$30,000.00
8	SWPPP Maintenance Sharing	8/30/2004	\$75,000.00
9	Additional Photo Survey/Public Relations	9/14/2004	\$50,000.00
10	Temporary Shuttle Van Service	7/16/2004	\$650,000.00
10S1	Additional Funds for Temporary Shuttle Van Service	6/23/2005	\$100,000.00
10S2	Additional Funds for Temporary Shuttle Van Service	1/12/2007	\$500,000.00
11	Utility Potholing	9/14/2004	\$100,000.00
12	Just-In-Time Training (RSC Pavement)	2/10/2005	\$5,000.00
13	PMIV Document Management System	11/3/2004	\$486,743.50
14	Temporary Suspension	5/19/2004	\$0.00
15	Archaeology Investigation	7/19/2004	\$30,000.00
15S1	Additional Funds for Archaeology Investigation	4/22/2005	\$15,000.00
16	Roadway Profile at WTI	Voided	N/A
17	Modify Drainage at G4 Entry Vault	10/24/2006	\$108,217.45
18	Access Control Measures	9/8/2004	\$50,000.00
19	EDR1 Alignment Modification	5/12/2005	\$0.00
20	A490 Bolts	10/23/2006	\$0.00
21	Removal /Disposal of Stairway	4/13/2005	\$14,060.00
22	Clean Stairs and Walkways	5/24/2005	\$35,000.00
22S1	Additional Funds for Cleaning Stairs and Walkways	11/24/08	\$25,000.00
23	Shared Field Data System (ShareArchive)	Voided	N/A
24	East and West Tie-In Temporary Suspension	2/1/2005	\$2,181,467.40
Total for Baseline Contract Change Orders			\$12,107,527.26

CCO #	Description	Executed Date	Cost
24S1	Read Inclinometer/Adjust Equipment Costs	10/18/2005	\$29,782.99
24S2	Temporary Suspension Partially Extended	5/2/2006	\$4,812,631.58
24S3	Contract Days Extension/TRO Compensation	Voided	N/A
25	Bent 48, 49R, 52R Outside Boundary	3/24/2005	(\$19,000.00)
26	Bent 48 Articulation	4/22/2005	\$0.00
27	Bent 52L Footing Conflict	1/19/2006	\$94,386.51
28	Hydroseed Around W2 Columns	3/24/2005	\$20,000.00
29	Replacement of Surveillance Camera	3/24/2005	\$3,542.00
30	Additional Elastic Response Analysis	5/31/2005	\$10,700.00
31	Soil Analysis Outside Plan Limits	6/27/2005	\$20,000.00
32	SFPUC Permit Specification Change	5/17/2005	\$0.00
33	Design Enhancements	Voided	N/A
34	Pole Structure Welding Specification Revision	9/30/2005	\$0.00
35	Revision of East Tie-In Design Criteria	Voided	N/A
36*	Extend Limits of Viaduct Demolition	Voided	N/A
37	4 Hr Emergency Travel Way	Voided	N/A
37S1	Emergency Travel Way Falsework	Voided	N/A
38	Revision of West Tie-In Design Criteria	8/4/2005	\$0.00
39	Provide Shuttle Service to USCG	6/27/2005	\$10,000.00
40	Sewer Pipe Material Change	9/26/2005	\$1,561.95
41	Bent 49L Utility Relocation	Voided	N/A
42	Bent 48R Pile Load Test	9/12/2005	\$20,000.00
42S1	Bent 52R Pile Load Test	12/15/2005	\$5,000.00
43	Material On Hand Specification Change	9/16/2005	\$75,953.88
43S1	Addition of YBITS Advance to Material On Hand	Voided	N/A
44	Electrical Call Box Relocation		\$47,480
45	Additional SWPPP	2/21/2006	\$250,000.00
46	Southgate Road Reopening	3/8/2006	\$50,000.00
47	Hazardous/Non-Hazardous Soil Removal	12/15/2005	\$100,000.00
48	Buried Man-Made Objects	12/15/2005	\$50,000.00
			\$12,107,527.26

- The scope of work for CCO No. 36 was completed and compensated for under the larger scope of CCO No. 76.

South-South Detour, Contract No. 04-0120R4
Contract Change Order Implementation Strategy
February 4, 2009

DRAFT

SSD New Viaduct

1

Progress of Work

Construction of foundations, columns, and bent caps is complete. Fabrication of the structural steel truss, performed by Dongkuk S&C in South Korea, is complete with all steel having arrived in the U.S.. All Viaduct steel has been erected into place. Concrete has been poured for both upper and lower decks in Spans 48 and 49. Deck construction is ongoing in Span 50 and Span 51.

Status of Contract Change Orders: SSD New Viaduct:

CCO	Method of Payment	Description	HQ Status	TBPOC Status	CCO Status	Current Estimate/ Actual Cost	Change from March 08 Approved Budget
49	LS	Stringer and Floor Beam Design Study	N/A	N/A	Executed 5/2/2006	\$109,182	N/A
49S1	FA	Truss Design Modifications (Changes to Stringer and Floor Beam Connections)	I&A 12/08/06	N/A	Executed 8/17/2006	\$150,000	N/A
49S2	FA		I&A 12/08/06	N/A	Executed 12/18/2006	\$100,000	N/A
Subtotal (CCO #49 and Supplements)						\$359,182	
50	FA	Stand Alone Viaduct Design	N/A	N/A	Executed 5/8/2006	\$325,000	N/A
50S1	FA		I&A 9/21/06	N/A	Executed 10/16/2006	\$300,000	N/A
50S2	FA		I&A 12/08/06	N/A	Executed 12/18/2006	\$100,000	N/A
50S3	FA		I&A 2/09/07	N/A	Executed 2/13/07	\$175,000	N/A
Subtotal (CCO #50 and Supplements)						\$900,000	
54	LS	Deck Drainage	N/A	N/A	Executed 5/2/07	\$8,000	N/A
55	LS	Viaduct Fabricator Change (SGT Closeout)	I&A 7/08/07	Approved 6/27/07	Executed 8/7/07	\$5,665,330	N/A
55S1	LS	SGT Fabrication Closeout - Dongkuk Materials		Approved 3/5/08	Executed 3/17/08	\$980,600	\$70,600
59	LS	Water Blast Rebar Cages	N/A	N/A	Executed 2/22/07	\$5,000	N/A
59S1	LS	Additional funds, Water Blast Rebar Cages	N/A	N/A	Executed 11/24/08	\$5,000	\$5,000
60	LS	Construction of Bent Caps	I&A 6/13/07	Approved 6/27/07	Executed 6/18/07	\$7,435,950	N/A
67	FA	Viaduct/ETI Interface Modifications (Design Cost)	I&A 5/14/07	N/A	Executed 9/27/07	\$800,000	N/A
79	LS	Fabrication Cost for Viaduct Design Changes July '05 - October '06	I&A 7/19/07	N/A	Executed 8/7/07	\$803,400	N/A
79S1	LS	Fabrication Cost for Viaduct Design Changes - July 05-Oct 06		N/A	Executed 8/4/08	\$75,860	(\$174,140)
80	LS	Erection Costs for Viaduct Design Changes through October 2006		Approved 1/31/08	Executed 2/20/08	\$6,912,200	N/A
82	FA	AC Paving and Erosion Control for Deck Drainage		N/A	In progress	\$250,000	\$0
85	LS	Design of 300mm Waterline Relocation	N/A	N/A	Executed 3/17/08	\$12,480	\$1,994
87	LS	Viaduct Shipping Escalation Costs	I&A 7/24/07	N/A	Executed 10/2/07	\$534,570	N/A
87S1	LS	Viaduct Shipping Escalation Costs	I&A 1/14/08	N/A	Executed 1/30/08	\$200,000	N/A
88	LS	Viaduct Fabrication Delays	I&A 7/19/07	N/A	Executed 8/7/07	\$954,460	N/A
88S1	LS	Viaduct Fabrication Delays	I&A 8/22/07	N/A	Executed 9/27/07	\$776,630	N/A
98	FA/LS	Viaduct Steel Storage and Handling Cost		N/A	Executed 6/18/08	\$845,370	\$345,370
99	LS	Viaduct Erection Costs (Post Oct. 2006)		N/A	Executed 5/22/08	\$862,614	(\$139,716)

South-South Detour, Contract No. 04-0120R4
Contract Change Order Implementation Strategy
February 4, 2009

DRAFT

100	FA	Viaduct Fabrication Costs (Post Oct. 2006)	I&A 1/22/08	N/A	Executed 1/28/08	\$650,000	N/A
105	FA/LS	Dongkuk Fabrication and Temp Bracing Fabrication Costs (July 2007 Plans)		Approved 4/3/08	Executed 4/17/08	\$2,140,640	\$690,640
106		CCO Voided...previous scope of work was incorporated into CCO 105				-	-
107	LS	Furnish and Drive Erection Tower Falsework Piles		N/A	Executed 10/02/08	\$855,190	\$355,190
111	FA/LS	USCG Parking Replacement and Protection	N/A	N/A	Executed 3/17/08	\$163,223	\$163,223
111S1	LS	Additional costs USCG Parking Lot	N/A	N/A	Executed 6/30/08	\$8,940	\$8,940
115	FA	Third VIA Shipping for CCO #67 July 07 plans		N/A	Executed 5/22/08	\$850,000	\$450,000
128		Waterline Relocation (NOPC 6)		N/A	In progress	\$200,000	\$200,000
133		Lightweight Conc. Mix Design Spec Change		N/A	Executed 9/12/08	\$0	\$0
135	LS	Rebar Deck Escalation Costs		N/A	In progress	\$995,100	\$495,100
136	FA/LS	Provide additional alternate entrance access to USCG Base	N/A	N/A	Executed 9/23/08	\$74,540	\$74,540
138	LS	Waterline Relocation for Fire Hydrant (Conflicts with Span 49 Falsework)	N/A	N/A	Executed 9/23/08	\$278,200	\$278,200
148	FA	USCG Road Canopy below Viaduct		N/A	Executed 9/23/08	\$500,000	\$500,000
152		Relocate USCG Road for steel erection FW Towers at Span 51		N/A	In progress	\$336,420	\$186,420
156		Span 49 F/W Conflict w/ USCG Utilities	N/A	N/A	Executed 9/23/08	\$180,820	\$180,820
Current Forecast for SSD New Viaduct						\$35,619,719	\$3,692,181

Budget Status

The Viaduct portion of the SSD was bid at \$26.74M. The projected additional costs in the December 14, 2006 Strategy Memorandum were estimated to be \$9M. The January 2008 revised additional cost estimate is \$31.9M with a current projection of \$35.6M. CCOs executed to date are \$33.8M.

West Tie-In

Phase 1

2a

Progress of Work

Phase 1 work was substantially complete with the move in of the Structure on September 03, 2007. Miscellaneous electrical and drainage work remain. WB On-ramp was reopened on August 8, 2008.

Status of Contract Change Orders: West Tie-In Existing Viaduct (Phase 1)

CCO	Method of Payment	Description	HQ Status	TBPOC Status	CCO Status	Current Estimate/ Actual Cost	Change from March 08 approved Budget
58	FA	Bridge Removal Plan	N/A	N/A	Executed 11/21/06	\$60,000	N/A
58 S1	FA	Bridge Removal Plan	N/A	N/A	Executed 7/05/07	\$40,000	N/A
61	FA	Advance Engineering (Work Plans and Submittals), Site Prep (Ramp Closures, Access Road), Civil Work (Grading), Structure Work (Material Procurement)	I&A 1/09/07	N/A	Executed 2/27/07	\$400,000	N/A
61S1	LS/FA	Construction of Stage 1 Area and Substructure	I&A 5/16/07	Approved 6/27/07	Executed 5/18/07	\$9,995,644	N/A
66	FA	TMP - Video Equipment (WTI Phase 1)	N/A	N/A	Executed 7/20/07	\$175,000	N/A
68	FA	Temporary Electrical Work	N/A	N/A	Executed 7/20/07	\$140,000	N/A

South-South Detour, Contract No. 04-0120R4
Contract Change Order Implementation Strategy
February 4, 2009

DRAFT

68S1	FA	Temporary Electrical Work Stage 2, 3 & 4	I&A 12/02/07	N/A	Executed 10/31/07	\$510,000	N/A
72	LS	Structure Work (Superstructure), and Temporary Shuttle Service	I&A 7/19/07	Approved 7/27/07	Executed 7/20/07	\$11,096,900	N/A
76	LS	Labor Day Bridge Demolition and Move-In	I&A 7/19/07	Approved 7/27/07	Executed 7/20/07	\$2,240,300	N/A
76S1	LS	Labor Day Bridge Move-In (Changeable Message Signs, Temporary Signs, Traffic Control, Bridge Removal, Bridge Move-In, Paving and Roadway Repairs, CCM Support Costs, City Traffic Officers)	I&A 8/28/07	Approved 8/24/07	Executed 9/27/07	\$10,144,140	N/A
84	LS	Skid Track Foundations and Temporary Columns	I&A 7/27/07	Approved 7/27/07	Executed 7/31/07	\$3,980,000	N/A
101	LS	Reconstruct Slab, West Bound On-ramp		N/A	Executed 4/17/08	\$846,140	\$480,700
101S1		WB Onramp Supplemental Work		N/A	In Progress	\$149,560	
102	FA	North side Drainage Work	N/A	N/A	Executed 4/4/08	\$60,000	\$12,240
102S1	LS	Northside Drainage Work	N/A	N/A	In Progress	\$52,240	
103	LS	Labor Day Weekend Closure Misc. Costs		N/A	Executed 2/20/08	\$173,140	(\$26,860)
Current Status for West Tie-In (Phase 1)						\$40,063,064	\$466,080

Budget Status

The projected additional costs in the December 14, 2006 Strategy Memorandum were estimated to be \$40M. The January 2008 revised additional cost estimate is \$39.6M with a current projection of \$40.1M. CCOs executed to date are \$39.9M.

West Tie-In

Phase 2

2b

Progress of Work

Construction/Design coordination meetings with the Contractor are ongoing as needed. Foundation work and columns are complete. Falsework for Frame 1 and 2 is complete. Construction of Frame 1 and Frame 2 Superstructure in progress.

Status of Contract Change Orders: West Tie-In (Phase 2)

CCO	Method of Payment	Description	HQ Status	TBPOC Status	CCO Status	Current Estimate/ Actual Cost	Change from March 08 Approved Budget
62	LS	Construction of Phase 2 Foundations and Credits for Elimination of Bid Items 12 and 90		Approved 4/4/08	Executed 4/7/08	(\$4,649,850)	\$309,150
71	LS	WTI Phase 2 Pile at Bent 46L/Slab Bridge Removal	I&A 7/24/07	N/A	Executed 7/20/07	\$384,130	N/A
108	LS	Substructure		Approved 6/18/08	Executed 6/25/08	\$5,378,800	\$720,800
117	FA	Surface Drainage (Southside)		N/A	Executed 1/6/09	\$150,000	\$0
141	LS/FA	Superstructure Construction		Approved 11/18/08	Executed 11/25/08	\$13,200,000	\$3,855,000
141S1		Superstructure Construction Completion Incentive (Release of Frame 1 Bent Cap FW)		TBD	In Progress	\$1,500,000	\$1,500,000
143		Civil Work (EB Onramp and Mainline)		TBD	In Progress	\$5,033,035	\$0
161		T7-Line Detour		N/A	Executed 11/25/08	\$403,965	\$0
Current Status for West Tie-In (Phase 2)						\$21,400,080	\$6,384,950

Budget Status

The Contractor's bid price for the West Tie-In was \$9.0M. Based on the Department's December 14, 2006 Strategy Memorandum, the costs associated with the Phase 2 West Tie-In work were estimated to be an additional \$13.0M. The January 2008 revised additional cost estimate is \$15.0M, with a current projection of

South-South Detour, Contract No. 04-0120R4
Contract Change Order Implementation Strategy
February 4, 2009

DRAFT

\$21.4M. The January 2008 revision is based on complete foundation plans and 65% in progress substructure and superstructure plans.

East Tie-In

3

Progress of Work

Complete bent 52A and skid bent foundations design packages were delivered October 2007. Complete ETI design plans for the skid bents and skid beams were delivered March 15, 2008 and complete truss plans were delivered April 7, 2008. Construction/Design Coordination meetings with the Contractor are ongoing.

Fabrication subcontractors are continuing to procure material and fabricate members. Fabrication of the skid bent and skid beams is taking place at Thompson Metal Fab, Inc. in Vancouver, WA and the fabrication of the truss is taking place at Stinger Welding Inc. in Coolidge, AZ. The first steel for the skid bents has been delivered to the site.

The existing SFPUC sanitary sewer pump station has been relocated, the new pump station is up and running. Construction of the skid bent foundations is progressing on schedule. Lead abatement in span YB-4 of the existing truss is complete. Work on the bent cap at bent 52A is complete. Work on the crane runway trestle is complete. Erection of the Skid Bent towers has begun.

Status of Contract Change Orders: East Tie-In

CCO	Method of Payment	Description	HQ Status	TBPOC Status	CCO Status	Current Estimate/ Actual Cost	Change from March 08 Approved Budget
63	FA	Advance Engineering (Work Plans and Submittals)	I&A 8/22/07	N/A	Executed 9/27/07	\$800,000	N/A
69	LS	Procurement of Pump/Control Panel for Pump Station Relocation	N/A	N/A	Executed 10/10/07	\$111,280	N/A
69S1	LS	Construction for Pump and Control Panel for Relocated Pump Station		N/A	Executed 3/17/08	\$499,996	\$11,986
69S2	LS	Sewer Pump Electrical Changes		N/A	In Progress	\$2,916	\$2,916
90	LS	Bent 52A and Skid Bent Footings and Credits for Eliminated Bid Items 10 and 42		Approved 4/4/08	Executed 4/14/08	\$11,308,380	\$0
92	FA	ETI AT&T Fiber Optic Relocation	N/A	N/A	Executed 12/17/07	\$175,000	N/A
93	LS/FA	Lead Paint Mitigation Existing Truss (Span YB-4)		N/A	Executed 2/20/08	\$563,725	\$3,725
97	FA	Bent 52A and Skid Bent Ftg's Material Procurement	I&A 11/06/07	N/A	Executed 11/19/07	\$850,000	N/A
104	LS	Pier E-1 Access Towers	N/A	N/A	Executed 1/30/08	\$150,000	N/A
113	LS	Relocate Waterline in Conflict with Northern Skid Bent Footings	N/A	N/A	Executed 3/17/08	\$167,990	\$167,990
121	LS	Construct Stage 1 Soil Nail Wall, Upper East Tie-In area	N/A	N/A	Executed 3/17/08	\$142,670	\$0
121S1	LS	Construct Stage 2 Soil Nail Wall, Upper East Tie-In area	N/A	N/A	In Progress	\$518,130	
127	FA	RTU - 8 Service Platform	N/A	N/A	Executed 9/03/08	\$75,000	(\$75,000)
		Roll-In Roll-Out, Install Joint Seals, Demolition, Existing Truss Strengthening, Stage 2 Wall, TMP, and Civil Work			In Progress	\$17,963,611	\$0
129	LS	Skid Bent and Truss Steel Erection		Approved 11/10/08	Executed 11/25/08	\$14,712,500	\$5,493,651
137	LS	Pump station Water Tank Demo	N/A	N/A	Executed 6/26/08	\$114,490	\$114,490
112	FA	Material Procure Skidbent (1532 Tower Legs)		Approved 2/4/08	Executed 2/19/08	\$2,000,000	\$20,189,405
112S1	FA	Material Procure ETI Superstructure		Approved 3/5/08	Executed 3/17/08	\$8,500,000	
112S2	FA	Material Procure ETI Temporary Bypass Structure		Approved 6/16/08	Executed 6/25/08	\$3,500,000	

South-South Detour, Contract No. 04-0120R4
Contract Change Order Implementation Strategy
February 4, 2009

DRAFT

112S3	FA	Material Procure - Additional Funds		Approved 11/13/08	Executed 11/25/08	\$3,000,000	
116	FA/LS	Fabricate Superstructure & Skidbent		Approved 6/16/08	Executed 8/8/08	\$14,166,180	
116S1	FA/LS	Skidbeam Design Modifications and Shipping Costs		Approved 12/23/08	In Progress	\$1,896,750	
140	LS	Truss Steel Fabrication		Approved 9/04/08	Executed 9/23/08	\$10,920,525	
166		Skid Bent & Beam Fabrication Acceleration		Verbal Approval 11/06/08 Approved 12/23/08	In Progress	\$2,028,950	
166S1		Skid Bent & Beam Fabrication Incentive		Approved 12/23/08	In Progress	\$900,000	
144	FA	Expansion Joint Mock-up		N/A	Executed 9/23/08	\$850,000	\$859,972
144S1		Expansion Joint Fabrication		TBD	In Progress	\$2,900,000	
149	FA	Bearing Fabrication		Approved 11/10/08	Executed 11/25/08	\$1,600,000	\$1,151,118
154	LS	East Pile Deduct at BW6, East Pile	N/A	N/A	Executed 9/04/08	(\$400)	(\$400)
154S1	LS	Pile Anomaly Deduction at A6W & B52A	N/A	Approved 11/13/08	Executed 11/25/08	(\$2,183)	(\$2,183)
164	LS	ETI Steel Erection Crane Runway Trestle		ATP 11/14/08 Approved 12/23/08	Executed 12/6/09	\$2,700,000	\$2,700,000
169		Skid Beam Jobsite Handling and Local Transportation Costs		Approved 12/23/08	In Progress	\$1,095,020	\$1,095,020
172	LS	Lead Paint Abatement and Access at YB-3		N/A	In Progress	\$210,450	\$210,450
Current Status for East Tie-In						\$104,420,980	\$31,923,140

Budget Status

The Contractor's bid price to construct the Contractor's design for the East Tie-In was \$6.0M with an additional \$1.46M to demolish the remaining portion of the ETI YB-4 span. The Department's December 14, 2006 Strategy Memorandum estimated an additional cost of \$34.0M to construct the Department's ETI roll out/roll in design concept. At the time, this estimate was based on minimal design information available. The January 2008 revised additional cost estimate is \$72.5M, with the current projection at \$104.4M. This revision is based on complete Bent 52A and skid bent foundation design plans and 65% skid bent, skid beam, and truss design plans. Executed CCOs to date are \$76.9M.

The material procurement and fabrication cost increases (CCOs 112, 116, 140, & 166) are attributed to an increase in steel weight from the 65% to 100% designed plans, along with a market fluctuation in steel price, as well as additional costs to expedite the Skid Bent/Beam and Steel Truss fabrication work.

**Yerba Buena Island Transition Structures
Advance Foundations**

4

Progress of Work

The YBITS foundation and column locations being advanced are W3R/L, W4R/L, W5R/L, W6R/L, W7R/L, W7 Ramp and the temporary E.B. onramp abutment.

- W3 3L – substantially completed
- 3R – footing has been poured, work on the 2nd lift of column in progress
- W4 4L – substantially completed
- 4R – column (2nd lift of 3) in progress
- W5 5L – 75 of 140 piles driven

South-South Detour, Contract No. 04-0120R4
Contract Change Order Implementation Strategy
February 4, 2009

DRAFT

- W6 5R – work not started
6L – substantially completed
6R North – column (2nd lift of 3) in progress
6R South – work not started
- W7 Mainline – construction of the temporary soil nail wall complete, construction of Soldier pile wall in progress
Ramp – work not started
- EB On-ramp abutment – temporary shoring piles and permanent CIDH piles have been installed

Status of Contract Change Orders: YBI Transition Structures Advance Foundations

CCO	Method of Payment	Description	HQ Status	TBPOC Status	CCO Status	Current Estimate/ Actual Cost	Change from March 08 Approved Budget
64	FA	YBITS W3L Site Prep and Grading and Construct Access Road	N/A	N/A	Executed 1/8/07	\$150,000	N/A
64S1	LS/FA	YBITS W3L Foundation and Column to Splice Zone, Integrated Shop Drawings for W3L, Concrete Washouts, 50% of Flagging, and Traffic Controls	I&A 3/13/07	Approved 2/15/07	Executed 4/4/07	\$5,835,000	N/A
65	FA	Demo Exist Bridge Adv. Planning	N/A	Approved 4/14/08	Executed 4/18/08	\$175,000	\$0
65S1		Demolish Exist Bridge (Bent 48 to YB-4)		TBD	In Progress	\$7,625,000	\$0
70	FA	Integrated Shop Drawings for Remaining YBITS Advance Locations (W3R, W4L/R, W5L/R, W6L/R, W7L/R, and W7 Ramp)	I&A 4/04/07	N/A	Executed 5/1/07	\$500,000	N/A
70S1	FA	YBITS Advance – ISD 3R, 4R/L, 5R/L, 6R/L, 7R/L & ramp		N/A	Executed 1/30/08	\$450,000	N/A
73	LS	YBITS W3R, W4R, W5R/L, W6R/L, and W7 Ramp Foundations and Columns	I&A 10/24/07	Approved 10/30/07	Executed 11/19/07	\$62,958,990	N/A
73S1		Duct Bank Revisions		N/A	In Progress	\$200,000	\$200,000
75	LS	YBITS W7R/L Foundations and Columns		Approved 4/3/08	Executed 4/14/08	\$13,125,000	(\$3,682,884)
75S1		Bent W7 Structure Backfill			In Progress	\$1,750,000	
77	LS	YBITS W4L Foundations and Columns	I&A 6/13/07	Approved 7/27/07	Executed 7/20/07	\$7,125,000	N/A
78	FA	Relocation of Sewer Force Main	N/A	N/A	Executed 7/17/07	\$125,057	N/A
94	LS	YBITS Temp. EB Onramp Abutment Piles and Shoring		TBD	In Progress	\$400,000	(\$1,819,850)
118	FA	Vibration & Elev. Monitoring at W5L		N/A	Executed 2/20/08	\$50,000	\$50,000
118S1	FA/LS/ID	Nimitz House vibration monitoring		N/A	Executed 8/05/08	\$50,050	\$50,050
120	LS/Credit	CIDH Pile Mitigation Deduct		N/A	Executed 3/17/08	(\$400)	(\$400)
124	FA/LS	Seismic Monitoring & Column Grounding		N/A	Executed 11/25/08	\$353,975	\$353,975
126	FA	YBITS Excavation / Hazmat Disposal		Approved 4/3/08	Executed 4/17/08	\$500,000	\$400,000
147	LS	Add Cost W4R Foundation Construction		N/A	Executed 7/21/08	\$25,024	\$25,024
155	FA	Excess Soil Offhaul		N/A	Executed 9/03/08	\$500,000	\$500,000
159		Redesign Bent W7 Soil Nail Wall		TBD	In Progress	\$916,280	\$916,280
Current Status for YBI Transition Structures Advance Foundations						\$102,813,976	(\$3,007,805)

Budget Status

The Department's December 25, 2006 Strategy Memorandum estimated the cost to construct Bents W3R/L, W4R/L, W5R/L, W6R/L, W7R/L, and W7 Ramp to be \$107M. In addition, the temporary E.B. onramp abutment was added at a later date with no estimate revision. The Departments December 14, 2006 Strategy Memorandum estimated the additional demolition costs for the existing bridge (Bent 48 through YB-4) to be

\$3.5M. Removal of the existing bridge is included in the current contract; however, the Department anticipates additional costs resulting from impacts of the YBITS Advance work and associated costs due to escalation. The combined estimate for both was \$110.5M. The January 2008 revised additional cost estimate is \$105.8M with a current projection of \$102.8M. Total CCOs executed to date are \$91.9M.

Administrative Issues General CCOs

5

Progress of Work

Administrative issues that remain on the SSD contract are related to setting project milestones and determining time related overhead resulting from the contract time extensions, escalation costs, the increased scope of work, and other necessary changes to the contract. Additionally, costs for implementing COZEEP for the East and West Tie-Ins need to be accounted for.

The following list of target milestones was previously provided to the Contractor to incorporate into the project schedule. This information will be revised as more detailed schedule information is developed.

	Date	Status	Notes
W3L (foundation and column up to splice zone)	March 15th, 2007	Complete	Finished 3/15/07
West Tie-In Phase 1 Viaduct Demo/Roll-In Complete	September 4th, 2007	Complete	Finished 9/04/07
Access to W3R Available to CCM	January 2nd, 2008	Partial access provided	Coordinating access with SAS
Upper East Tie-In Area Available to CCM (Revised October 2008)	December 2009	Partial access provided	Coordinating access with SAS
East Tie-In Roll-Out/Roll-In Complete (Revised October 2008)	September 7th, 2009		
Project Completion (Revised October 2008)	April 30th, 2010		

The Department has extended TRO compensation at the original contract rate through September 1, 2009. The Contractor has completed a TRO audit. The Department is reviewing this information so that an appropriate TRO adjustment can be negotiated.

The Department continues to pursue a resolution to the remaining NOPC issues. Of the 18 NOPC issues, only three remain outstanding. Of the three it is anticipated that Viaduct CCO #128 will resolve NOPC #6, resolution of the existing structure demolition costs will resolve NOPC #15, and resolution of the TRO costs will resolve NOPC #18.

Status of Contract Change Orders: Administrative Issues

CCO	Method of Payment	Description	HQ Status	TBPOC Status	CCO Status	Current Estimate/ Actual Cost	Change from March 08 Approved Budget
1 S2	FA	Flagging & Traffic Control	N/A	N/A	Executed 12/5/07	\$200,000	N/A
1S3	FA	Flagging & Traffic Control	N/A	N/A	Executed 7/2/08	\$300,000	\$300,000
13S1	FA	PMIV Additional Funds (Resolved NOPC 7)			Executed 3/17/08	\$300,000	\$300,000
45 S1	LS	Additional SWPPP	I&A 12/14/07	N/A	Executed 1/31/08	\$350,000	N/A
51	LS	NOPC 12 & 13 Resolution	N/A	N/A	Executed 8/17/06	\$25,234	N/A
52	0	Elimination of Contractor's Design of Tie-Ins	I&A 1/19/07	N/A	Executed 3/2/07	\$0	N/A
53	FA	Handling and Storage of Material	I&A 11/06/06	N/A	Executed 12/8/06	\$240,000	N/A
56	LS	Contractor's Design additional cost... Resolved NOPCs 2,3,4,8,9,10,11,14, and 16		Approved 3/5/08	Executed 3/17/08	\$6,837,310	(\$162,690)
57	LS	Demolition of Building 206	N/A	N/A	Executed 10/18/06	\$22,378	N/A

South-South Detour, Contract No. 04-0120R4
Contract Change Order Implementation Strategy
February 4, 2009

DRAFT

57S1	LS	Remove and Clear Building 254	N/A	N/A	Executed 6/4/07	\$10,572	N/A
66S1	FA	Video/Photo Documentation Services Supplemental Funds	N/A	N/A	Executed 4/14/08	\$200,000	\$200,000
86	LS	Additional Suspension Costs	N/A	N/A	Executed 5/19/08	\$42,764	(\$57,236)
91	LS	Contract Days Extension/TRO Compensation to November 08	RPP 8/28/07	TBD	Executed 10/31/07	\$1,818,948	N/A
91 S1	LS	Base Contract TRO Extension to September 1, 2009	I&A 10/25/07	Approved 10/30/07	Executed 11/16/07	\$8,463,159	\$0
91 S2	LS	Global TRO adjustment and Base Contract TRO extension to December 31, 2009		TBD	In Progress	\$28,600,000	\$0
96	FA	SWPPP Steep Slope Stabilization Measures	N/A	N/A	Executed 1/4/08	\$190,000	\$0
96S1	FA	Add Funds Shotcrete Slope at Bent 48	N/A	N/A	Executed 7/2/08	\$40,000	\$40,000
109	FA	MEP Coordination	N/A	N/A	Executed 1/30/08	\$100,000	\$0
110	FA	Geotech. Exploration Pads and Support	N/A	N/A	Executed 2/20/08	\$150,000	\$50,000
119	FA/LS/ID/UP	Project Wide SWPPP	I&A 4/07/08	N/A	Executed 4/17/08	\$638,939	\$638,939
123	FA	Treasure Island Yard Lot Rental	I&A 4/16/08	N/A	Executed 4/17/08	\$600,000	\$600,000
125	FA	Project Access Paving		N/A	Executed 4/04/08	\$150,000	\$150,000
125S1	FA	Additional Funds, Project Access Paving	I&A 6/12/08	N/A	Executed 6/25/08	\$35,000	\$35,000
130	LS	Project Retention	I&A 4/07/08	N/A	Executed 4/14/08	\$136,510	\$136,510
131	FA	Permanent Erosion Control		N/A	In Progress	\$ 125,498	\$ 125,498
132	LS	Storm Damage Slope Repair (Resolved NOPC 17)		N/A	Executed 5/23/08	\$23,870	\$23,870
142	FA	Macalla Road Sinkhole Repair		N/A	Executed 7/18/08	\$150,000	\$150,000
146	FA	Macalla Road Tree Trimming	N/A	N/A	Executed 7/21/08	\$50,000	\$100,000
146S1	FA	Add Funds Macalla Road Tree Trimming	N/A	N/A	Executed 11/25/08	\$50,000	
151		Public Safety Spec Change (Suspended Load)			Executed 9/23/08	\$0	\$0
157		USCG Access Mitigation Stairway Design to Quarters Above		N/A	In Progress	\$150,000	\$150,000
		Non CCO Charges...COZEPP, lead survey, respirator training			In Progress	\$1,323,000	\$0
Current Status for Administrative and General CCOs						\$51,323,182	\$2,779,891

Budget Status

As of January 2008 the revised additional cost estimate for Time Related Overhead, escalation issues, and job wide changes is \$48.6M with the largest estimated cost being attributed to a global TRO adjustment. As Contract Change Orders for these items are negotiated, this estimate will be updated. Costs related to settlement of NOPC issues not captured here will be paid out of the contract contingency.

Additionally, the original contract allotment provided \$1.3M for COZEPP. Subsequently, there were \$23,000 in other charges for a lead survey and respirator training both related to the WTI Phase 1 demolition work, providing for total non-CCO related charges of \$1.323M to the contract. These costs are shown here to capture costs to the project. It is also important to note that with two full bridge closures planned additional COZEPP funds may be required.

Total CCOs executed to date are \$21.1M.

ITEM 3: PROGRESS REPORTS

- a. Final January 2009 Monthly Progress Report

Memorandum

TO: Toll Bridge Program Oversight Committee (TBPOC) **DATE:** January 26, 2009

FR: Andrew Fremier, Deputy Executive Director, BATA

RE: Agenda No. - 3a
Progress Reports
Item- Draft January 2009 Monthly Progress Report

Recommendation:

APPROVAL Confirmation

Cost:

N/A

Schedule Impacts:

N/A

Discussion:

By meeting time, the PMT would have approved the final January 2009 Monthly Progress Report through delegated TBPOC authority on February 2, 2009 for distribution on February 3. TBPOC confirmation of this approval is requested.

Attachment(s):

Draft January 2008 Monthly Progress Report (see end of binder)



Toll Bridge Seismic Retrofit and Regional Measure 1 Programs

Monthly Progress Report January 2009

Draft
Version 3.0



**TOLL BRIDGE PROGRAM
OVERSIGHT COMMITTEE**

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION

Released: January 2009



Toll Bridge Seismic Retrofit and Regional Measure 1 Programs

Monthly Progress Report
January 2009



Bay Area Management Consultants
An Association of URS Corporation and Hatch Mott MacDonald



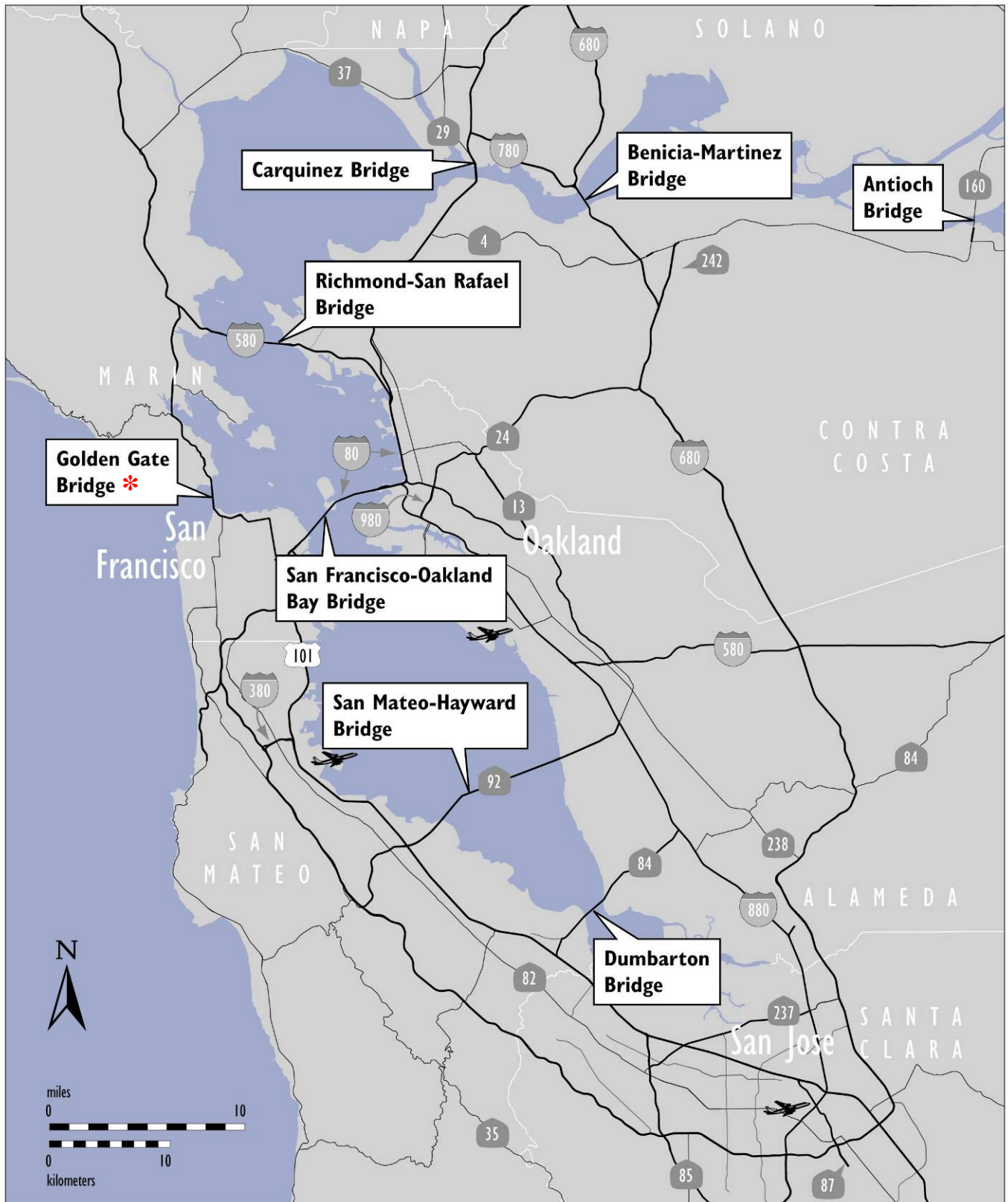
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Version 3.0

TABLE OF CONTENTS

Introduction	1
Executive Summary	2
<i>Toll Bridge Seismic Retrofit Program—Cost</i>	<i>2</i>
<i>Toll Bridge Seismic Retrofit Program—Schedule</i>	<i>3</i>
<i>Regional Measure 1 Program—Cost</i>	<i>4</i>
<i>Regional Measure 1 Program—Schedule</i>	<i>5</i>
<i>Highlights of Project/Program Activities and TBPOC Actions for January 2009</i>	<i>6</i>
Project / Contract Reports.....	7
<i>San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project Summary.....</i>	<i>8</i>
▶ Skyway Contract	10
▶ Self-Anchored Suspension (SAS) E2/T1 Foundations Contract	11
▶ Self-Anchored Suspension (SAS) Superstructure Contract.....	12
▶ Yerba Buena Island Detour (YBID).....	16
▶ YBI Transition Contracts (YBITS)	18
▶ Oakland Touchdown Contracts	20
▶ Other Contracts.....	22
▶ Other Completed Contracts and Related Work	23
<i>San Francisco-Oakland Bay Bridge (SFOBB) West Approach Replacement Project.....</i>	<i>24</i>
<i>Other Completed Seismic Retrofit Projects</i>	<i>27</i>
<i>Other Toll Bridges.....</i>	<i>28</i>
Project / Contract Reports.....	30
<i>New Benicia-Martinez Bridge Project Summary.....</i>	<i>31</i>
<i>Interstate 880/State Route 92 Interchange Reconstruction Project.....</i>	<i>33</i>
<i>Other Completed Regional Measure 1 (RM1) Projects.....</i>	<i>36</i>
Appendices.....	37
<i>Appendix A: Toll Bridge Seismic Retrofit Program</i>	<i>38</i>
<i>Appendix B: Toll Bridge Seismic Retrofit Program Cost Detail</i>	<i>40</i>
<i>Appendix C: YBITS Progress Diagram</i>	<i>41</i>
<i>Appendix D: OTD #1 Progress Diagram.....</i>	<i>42</i>
<i>Appendix E: West Approach Progress Diagram.....</i>	<i>43</i>
<i>Appendix F: Antioch/Dumbarton Bridge Baseline Schedule.....</i>	<i>44</i>
<i>Appendix G: Regional Measure 1 Program Cost Detail</i>	<i>45</i>
<i>Appendix H: Glossary of Terms</i>	<i>48</i>

Toll Bridges of the San Francisco Bay Area



* Under the jurisdiction of the Golden Gate Bridge, Highway and Transportation District

INTRODUCTION

In July 2005, Assembly Bill 144, (AB 144) Hancock created the Toll Bridge Project Oversight Committee (TBPOC) to implement a project oversight and project control process for the state Toll Bridge Seismic Retrofit Program projects and the Benicia-Martinez Bridge project. The TBPOC comprises the Director of the California Department of Transportation (Caltrans), the Executive Director of the Bay Area Toll Authority (BATA) and the Director of the California Transportation Commission (CTC). The TBPOC's project oversight and control processes include, but are not limited to, reviewing bid specifications and documents, providing field staff to review ongoing costs, reviewing and approving significant change orders and claims in excess of \$1 million (as defined by the committee) and preparing project reports.

AB 144 identified the Toll Bridge Seismic Retrofit Program and the new Benicia-Martinez Bridge Project as being under the direct oversight of the TBPOC. The Toll Bridge Seismic Retrofit Program includes:

Toll Bridge Seismic Retrofit Projects	Seismic Safety Status
San Francisco-Oakland Bay Bridge East Span Replacement	Construction
San Francisco-Oakland Bay Bridge West Approach Replacement	Complete
San Francisco-Oakland Bay Bridge West Span Seismic Retrofit	Complete
San Mateo-Hayward Bridge Seismic Retrofit	Complete
Richmond-San Rafael Bridge Seismic Retrofit	Complete
Eastbound Carquinez Bridge Seismic Retrofit	Complete
New Benicia-Martinez Bridge Seismic Retrofit	Complete
San Diego-Coronado Bridge Seismic Retrofit	Complete
Vincent Thomas Bridge Seismic Retrofit	Complete

The new Benicia-Martinez Bridge is part of a larger program of toll-funded projects, called the Regional Measure 1 (RM1) Toll Bridge Program, under the responsibility of the BATA. While the rest of the projects in the RM1 program are not directly under the responsibility of the TBPOC, BATA and Caltrans will continue to report on their progress as an informational item. The RM1 program includes:

RM1 Projects	Open to Traffic Status
Interstate 880/State Route 92 Interchange Reconstruction	Construction/Open
Old Benicia-Martinez Bridge Reconstruction	Construction/Open
New Benicia-Martinez Bridge	Open
Richmond-San Rafael Bridge Deck Overlay Rehabilitation	Open
Richmond-San Rafael Bridge Trestle, Fender & Deck Joint Rehabilitation	Open
Westbound Carquinez Bridge Replacement	Open
San Mateo-Hayward Bridge Widening	Open
State Route 84 Bayfront Expressway Widening	Open
Richmond Parkway	Open

This report focuses on identifying critical project issues and monitoring project cost and schedule performance for the projects as measured against approved budgets and schedule milestones. This report is intended to fulfill Caltrans' requirement to provide monthly project progress reporting to the TBPOC under Section 30952.05 of the Streets and Highway Code.

EXECUTIVE SUMMARY

Toll Bridge Seismic Retrofit Program—Cost (\$ Millions)

Project	Work Status	AB 144 / SB 66 Budget (07/20/05)	Approved Changes	Current Approved Budget (12/2008)	Cost To Date (11/2008)	Cost Forecast* (12/2008)	At- Completion Variance	Cost Status
a	b	c	d	e = c + d	f	g	h = g - e	i
SFOBB East Span Replacement Project								
Capital Outlay Support		959.3	-	959.3	665.1	977.1	17.8	●
Capital Outlay Construction		-	-	-	-	-	-	
Skyway	Complete	1,293.0	(38.9)	1,254.1	1,236.6	1,254.1	-	●
SAS E2/T1 Foundations	Complete	313.5	(32.6)	280.9	275.0	280.9	-	●
SAS Superstructure	Construction	1,753.7	-	1,753.7	575.4	1,767.4	13.7	●
YBI Detour	Design/Const	132.0	310.2	442.2	249.9	461.2	19.0	●
YBI Transition Structures		299.3	(23.2)	276.1	-	276.1	-	●
* YBITS Contract No. 1	Design	-	-	-	-	214.3	-	
* YBITS Contract No. 2	Design	-	-	-	-	58.5	-	
* YBITS Contract No. 3 - Landscape	Design	-	-	-	-	3.3	-	
Oakland Touchdown (OTD)		283.8		283.8	135.0	302.5	18.7	
* OTD Submarine Cable	Complete	-	-	-	7.9	9.6	-	●
* OTD No. 1 (Westbound)	Construction	-	-	-	127.2	226.5	-	●
* OTD No. 2 (Eastbound)	Design	-	-	-	-	62.0	-	●
* OTD Electrical Systems	Design	-	-	-	-	4.4	-	●
Existing Bridge Demolition	Design	239.2	-	239.2	-	222.0	(17.2)	●
Stormwater Treatment Measures	Complete	15.0	3.3	18.3	16.6	18.3	-	●
East Span Completed Projects		90.3	-	90.3	89.2	90.3	-	
Right-of-Way and Environmental Mitigation		72.4	-	72.4	39.3	72.4	-	●
Other Budgeted Capital		35.1	(3.3)	31.8	0.7	7.7	(24.1)	
Total SFOBB East Span Replacement Project		5,486.6	215.5	5,702.1	3,282.8	5,730.0	27.9	
SFOBB West Approach Replacement	Construction							●
Capital Outlay Support		120.0	-	120.0	110.9	120.0	-	
Capital Outlay Construction		309.0	41.7	350.7	302.5	350.7	-	●
Total SFOBB West Approach Replacement		429.0	41.7	470.7	414.4	470.7	-	
Richmond-San Rafael Bridge Retrofit	Complete	-	-	-	-	-	-	●
Capital Outlay Support		134.0	(7.0)	127.0	126.7	127.0	-	
Capital Outlay Construction & Right-of-Way		780.0	(90.5)	689.5	668.1	689.5	-	
Total Richmond-San Rafael Bridge Retrofit		914.0	(97.5)	816.5	794.8	816.5	-	
Program Completed Projects	Complete						-	
Capital Outlay Support		219.8	-	219.8	219.4	219.8	-	
Capital Outlay Construction		705.6	-	705.6	699.0	705.6	-	
Total Program Completed Projects		925.4	-	925.4	918.4	925.4	-	
Miscellaneous Program Costs		30.0	-	30.0	24.7	30.0	-	
Program Contingency		900.0	(159.7)	740.3	-	712.4	(27.9)	
Total Toll Bridge Seismic Retrofit Program		8,685.0	-	8,685.0	5,435.1	8,685.0	-	

● Within Approved Current Schedule and Budget

● Potential Cost and Schedule Impacts: Possible future need for Program Contingency Allocation

● Known Cost and Schedule Impacts: Request for Program Contingency Allocation forthcoming

*Current contract allotment to install two submarine electrical cables is \$11.5 million. Additional non-program funding to support this allocation beyond the \$9.6 million of available program funds has been made available by the Treasure Island Development Authority.

Toll Bridge Seismic Retrofit Program—Schedule

Project	AB 144 / SB 66 Project Complete Baseline (07/2005)	Approved Changes (Months)	Project Complete Current Approved Schedule (12/2008)	Project Complete Schedule Forecast (12/2008)	Schedule Variance (Months)	Schedule Status	Remarks
a	b	c	d = b + c	e	f = e - d	g	h
SFOBB East Span Replacement Project							
Skyway	Apr 07	8	Dec 07	Dec 07	-	●	See page 10.
SAS E2/T1 Foundations	Jun 08	(5)	Jan 08	Jan 08	-	●	
SAS Superstructure	Mar 12	12	Mar 13	Mar 13	-	●	See discussion on page 12.
YBI Detour	Jul 07	36	Jun 10	Jun 10	-	●	See discussion on page 16.
YBI Transition Structures	Nov 13	12	Nov 14	Nov 14	-	●	
Oakland Touchdown (OTD)	Nov 13	12	Nov 14	Nov 14	-	●	See Note.
• OTD Submarine Cable	n/a	-	Jan 08	Jan 08	-	●	
• OTD Westbound	n/a	-	Jan 10	Jan 10	-	●	
• OTD Eastbound	n/a	-	Nov 14	Nov 14	-	●	
Existing Bridge Demolition	Sep 14	12	Sep 15	Sep 15	-	●	See Note.
Stormwater Treatment Measures	Mar 08	-	Mar 08	Mar 08	-	●	
◆ Open to Traffic Date: Westbound	Sep 11	12	Sep 12	Sep 12	-	●	See Note.
◆ Open to Traffic Date: Eastbound	Sep 12	12	Sep 13	Sep 13	-	●	See Note.
SFOBB West Approach Replacement	Aug 09	(7)	Jan 09	Jan 09	-	●	Seismic retrofit completed December 2, 2008. Ongoing punchlist and close-out items scheduled for completion by February 2009.
◆ Open to Traffic Date: Mainline Realignment	n/a	-	Apr 08	Apr 08	-	●	Opened to traffic April 12, 2008
Richmond-San Rafael Bridge							
• Seismic Retrofit	Aug 05	(1)	Jul 05	Jul 05	-	●	Seismic retrofit completed July 29, 2005. Formal acceptance of contract October 28, 2005. \$89 million has been transferred to Program Contingency.

Note: Schedules for selected projects and the Open to Traffic dates were extended by 12 months from the AB144/SB66 baseline schedule due to Addenda #5 and #7 on the SAS Superstructure contract.

Regional Measure 1 Program—Cost (\$ Millions)

Project	Work Status	BATA Budget (07/2005)	Approved Changes	Current Approved Budget (12/2008)	Cost To Date (11/2008)	Cost Forecast* (12/2008)	At- Completion Variance	Cost Status
a	b	c	d	e = c + d	f	g	h = g - e	i
New Benicia-Martinez Bridge Project	Construction							●
Capital Outlay Support		157.1	35.2	192.3	184.6	192.3	-	-
Capital Outlay Construction		861.6	173.5	1,035.1	975.9	1,035.1	-	-
Capital Outlay Right-of-Way		20.4	(0.1)	20.3	16.9	20.3	-	-
Project Reserve		20.8	4.0	24.8	-	24.8	-	-
Total New Benicia-Martinez Bridge Project		1,059.9	212.6	1,272.5	1,177.4	1,272.5	-	-
Carquinez Bridge Replacement Project	Complete							●
Capital Outlay Support		124.4	(0.2)	124.2	123.8	123.9	(0.3)	
Capital Outlay Construction		381.2	3.2	384.4	378.7	384.5	0.1	
Capital Outlay Right-of-Way		10.5	-	10.5	9.9	10.5	-	
Project Reserve		12.1	(3.0)	9.1	-	0.3	(8.8)	
Total Carquinez Bridge Replacement Project		528.2	-	528.2	512.4	519.2	(9.0)	
I-880/SR-92 Interchange Reconstruction	Construction							●
Capital Outlay Support		28.8	26.2	55.0	43.9	55.0	-	-
Capital Outlay Construction		94.8	60.2	155.0	49.6	155.0	-	-
Capital Outlay Right-of-Way		9.9	7.0	16.9	11.6	16.9	-	-
Project Reserve		0.3	17.8	18.1	-	18.1	-	-
Total I-880/SR-92 Interchange Reconstruction		133.8	111.2	245.0	105.1	245.0	-	-
Program Completed Projects	Complete							
Capital Outlay Support		62.0	(5.0)	57.0	57.5	58.8	1.8	-
Capital Outlay Construction		324.4	3.6	328.0	308.0	313.0	(15.0)	-
Capital Outlay Right-of-Way		1.7	-	1.7	0.5	0.8	(0.9)	-
Project Reserve		2.6	1.4	4.0	-	7.1	3.1	-
Total Program Completed Projects		390.7	-	390.7	366.0	379.7	(11.0)	-
Total Regional Measure 1 Program		2,112.6	323.8	2,436.4	2,160.9	2,416.4	(20.0)	-

- Within Approved Current Schedule and Budget
- Potential Cost and Schedule Impacts: Possible future need for Program Contingency Allocation
- Known Cost and Schedule Impacts: Request for Program Contingency Allocation forthcoming

Notes: Details may not sum to totals due to rounding effects.

Forecasts for the Monthly Reports are generally updated on a quarterly basis in conjunction with Risk Analysis assessments for the TBSRP Projects and the TBSRP Quarterly Reports.

Regional Measure 1 Program—Schedule

Project	BATA Project Complete Baseline (07/2005)	Approved Changes (Months)	Project Complete Current Approved Schedule (12/2008)	Project Complete Schedule Forecast (12/2008)	Schedule Variance (Months)	Schedule Status	Remarks
a	b	c	d = b + c	e	f = e - d	g	h
New Benicia-Martinez Bridge Project							
• Existing Bridge & Interchange Modifications	Dec 09	-	Dec 09	Oct 09	(2)	●	See page 31.
• Open to Traffic Date	Dec 07	-	Aug 07	Aug 07	-	●	
I-880/SR-92 Interchange Reconstruction	Dec 10	-	Jun 11	Jun 11	-	●	

Highlights of Project/Program Activities and TBPOC Actions for January 2009

Toll Bridge Seismic Retrofit Program

SFOBB East Span Seismic Replacement Project

- ◆ On the San Francisco-Oakland Bay Bridge West Approach Replacement Project, the California Department of Transportation (Caltrans) certified seismic safety on the project on December 22, 2008 – eight months ahead of schedule. Final closeout and punchlist work is ongoing on the contract and will be completed in the first quarter of 2009.
- ◆ On the San Francisco-Oakland Bay Bridge East Span Replacement Project, the Self-Anchored Suspension Span (SAS) contractor is in the process of putting up temporary structures that will support the new bridge during erection. A labor dispute arose in December 2009 involving the off-loading of the temporary structures from a ship while tied off to the job site dock. The dispute was tentatively resolved to allow for off-loading of the ship in the middle of the bay. The contractor and the TBPOC are working to resolve the dispute for future shipments. Completion of all temporary foundation structures is expected in the summer of 2009. Fabrication of the towers and bridge decks continue in China. The contractor has reported that this work has been delayed. The TBPOC and the contractor are negotiating a schedule mitigation proposal to accelerate the work. The shearleg crane barge to be used to lift the bridge sections into place is scheduled to arrive in the Bay Area in February.

New Benicia-Martinez Bridge Project

- ◆ On the Existing Benicia-Martinez Bridge Modification Contract, work to modify the old southbound I-680 bridge to add an additional traffic lane and bicycle/pedestrian lane is proceeding ahead of schedule. Caltrans is forecasting the work to be complete two months early in October 2009.



(6.1) Shearleg Crane Barge

PROJECT / CONTRACT REPORTS

Toll Bridge Seismic Retrofit Program

San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project Summary

- Skyway Contract
- Self-Anchored Suspension (SAS) E2/T1 Foundations Contract
- Self-Anchored Suspension (SAS) Superstructure Contract
- Yerba Buena Island (YBI)

Yerba Buena Island (YBI) Detour Contract

Yerba Buena Island (YBI) Transition Structure Contracts

- Oakland Touchdown (OTD)

Oakland Touchdown (OTD) Submarine Cable Relocation Contract

Oakland Touchdown (OTD) #1 Contract

Oakland Touchdown (OTD) #2 Contract

- Other Major Contracts
- Other Contracts and Related Project Work

San Francisco-Oakland Bay Bridge (SFOBB) West Approach Replacement Project

Other Completed Seismic Retrofit Projects

Toll Bridge Seismic Retrofit Program

San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project Summary

Project Description: The East Span will be seismically retrofitted through the complete replacement of the existing span. The remaining effort for this project consists of the following contracts: SAS Superstructure—construction of a self-anchored 385-meter main span superstructure incorporating a 160-meter fabricated structural steel tower with a main cable and inclined suspenders that will support steel orthotropic box girder decks; Yerba Buena Island (YBI) Detour—design and construction of a temporary double-deck bypass structure that will detour traffic to the existing SFOBB, while completing the westerly permanent tie-in structure of the new East Span at Yerba Buena Island; YBI Structures—construction of a new structure connecting the western end of the self-anchored suspension to the Yerba Buena Island viaduct, which will be retrofitted; Oakland Touchdown—at the Oakland end of the East Span, construction of two parallel, cast-in-place post-tensioned concrete viaducts, which join the Skyway to the at-grade Oakland approach fill; and Existing Bridge Demolition—demolition of the existing 1936 SFOBB East Span structure after the construction and placement of traffic onto the new East Span.

SFOBB East Span Replacement Cost Summary (\$ Millions)

Contract	AB 144/ SB 66 Budget	Approved Changes	Current Approved Budget (12/2008)	Cost To Date (11/2008)	Cost Forecast (12/2008)	Variance
a	b	c	d = b + c	e	f	g = f - d
Capital Outlay Support	959.3	-	959.3	665.1	977.1	17.8
Capital Outlay	-	-	-	-	-	-
Skyway	1,293.0	(38.9)	1,254.1	1,236.6	1,254.1	-
SAS E2/T1 Foundations	313.5	(32.6)	280.9	275.0	280.9	-
SAS Superstructure	1,753.7	-	1,753.7	575.4	1,767.4	13.7
YBI Detour	132.0	310.2	442.2	249.9	461.2	19.0
YBI Transition Structures	299.3	(23.2)	276.1	-	276.1	-
* YBITS 1	-	-	-	-	214.3	-
* YBITS 2	-	-	-	-	58.5	-
* YBITS 3 - Landscape	-	-	-	-	3.3	-
Oakland Touchdown	283.8	-	283.8	135.0	302.5	18.7
* OTD Submarine Cable	-	-	-	7.9	9.6	-
* OTD Westbound	-	-	-	127.2	226.5	-
* OTD Eastbound	-	-	-	-	62.0	-
* OTD Electrical Systems	-	-	-	-	4.4	-
Existing Bridge Demolition	239.2	-	239.2	-	222.0	(17.2)
Stormwater Treatment Measures	15.0	3.3	18.3	16.6	18.3	-
East Span Completed Projects	90.3	-	90.3	89.2	90.3	-
Right-of-Way and Environmental Mitigation	72.4	-	72.4	39.3	72.4	-
Other Budgeted Capital	35.1	(3.3)	31.8	0.7	7.7	(24.1)
TOTAL	5,486.6	215.5	5,702.1	3,282.8	5,730.0	27.9

SFOBB East Span Replacement Schedule Summary

Contract	AB 144/SB 66 Contract Completion Baseline (07/2005)	Approved Changes (Months)	Contract Complete Current Approved Schedule (12/2008)	Contract Complete Schedule Forecast (12/2008)	Schedule Variance (Months)
Skyway	April 2007	8	December 2007	December 2007	-
YBI Detour*	July 2007	36	June 2010	June 2010	-
Stormwater Treatment Measures	March 2008	-	March 2008	March 2008	-
SAS E2/T1 Foundations	June 2008	(5)	January 2008	January 2008	-
SAS Superstructure	March 2012	12	March 2013	March 2013	-
Oakland Touchdown (OTD)	November 2013	12	December 2014	December 2014	-
* OTD Submarine Cable	n/a	-	January 2008	January 2008	-
* OTD No. 1 (Westbound)	n/a	-	January 2010	January 2010	-
* OTD No. 2 (Eastbound)	n/a	-	November 2014	November 2014	-
YBI Transition Structure*	November 2013	12	November 2014	November 2014	-
Existing Bridge Demolition*	September 2014	12	September 2015	September 2015	-
Open to Traffic: Westbound	September 2011	12	September 2012	September 2012	-
Open to Traffic: Eastbound	September 2012	12	September 2013	September 2013	-

*Contract schedules being further assessed due to changes in SAS schedule.

Project Status: Construction is complete for the Skyway, SAS E2/T1 Foundations and Stormwater Treatment Measures contracts. Construction is currently ongoing for the YBI Detour, SAS Superstructure, and OTD #1 (westbound) contracts. Contracts in design include the OTD #2 (eastbound), YBITS Contract #2 and the Existing Bridge Demolition contract. Design of each contract is proceeding per its schedule requirements. The YBI Transition Structure (YBITS) Contract #1 has been advertised.

Project Issues: All projects except Demolition have a Risk Response Team and a Risk Register incorporating quantitative risk analyses. A Risk Register has also been developed for Capital Outlay Support (COS) costs, as well as a program-level risk register that captures risks common to all project. The development of a quantitative COS risk analysis is ongoing and is trending higher COS costs for the project.

The Risk Response Team for COS is evaluating the program costs and developing response actions to mitigate. Many of the actions have been effective, as evidenced by a reduction of risk impacts on the Skyway and E2/T1 contracts from the previous quarter. The effort to develop and execute risk response actions to mitigate the cost and schedule impacts posed by risk issues continues to be a high priority.

Recent TBPOC Actions: See the following contract detail pages for specific TBPOC actions on the East Span contracts.

Toll Bridge Seismic Retrofit Program

San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project

► SKYWAY CONTRACT

Contract Description: On the SFOBB East Span Replacement Project, the Skyway contract constructed twin pre-cast concrete segmental bridges that will connect the Oakland approach traffic to the new SAS.

Skyway Cost Summary (\$ Millions)

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (12/2008)	Cost To Date (11/2008)	Cost Forecast (12/2008)	Variance
a	b	c	d = b + c	e	f	g = f - d
East Span - Skyway						
Capital Outlay Support	197.0	(16.0)	181.0	181.0	181.0	-
Capital Outlay Construction	1,293.0	(38.9)	1,254.1	1,236.6	1,254.1	-
TOTAL	1,490.0	(54.9)	1,435.1	1,417.6	1,435.1	-

Note: Details may not sum to totals due to rounding effects.

Skyway Schedule Summary

Contract	AB 144/SB 66 Contract Completion Baseline (07/2005)	Approved Changes (Months)	Contract Complete Current Approved Schedule (12/2008)	Contract Complete Schedule Forecast (12/2008)	Schedule Variance (Months)
East Span - Skyway	April 2007	7	December 2007	December 2007	-

Contract Status:

- The contract was substantially completed by the end of 2007 and Caltrans accepted the Skyway Contract on March 24, 2008 upon completion of final punchlist items.

Contract Issues: None.

Recent TBPOC Actions: None.



(10.1) Aerial View of the East Span Looking towards Yerba Buena Island

Toll Bridge Seismic Retrofit Program

San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project

► SELF-ANCHORED SUSPENSION (SAS) E2/T1 FOUNDATIONS CONTRACT

Contract Description: The Self-Anchored Suspension (SAS) Span E2/T1 Foundation contract constructed the main tower foundation at location T1 and the foundations and columns of the first pier east of the main tower at location E2 in San Francisco Bay. The foundations and columns of the first pier west of the main tower located at W2 on Yerba Buena Island were completed under a separate earlier contract.

SAS E2/T1 Foundations Cost Summary (\$ Millions)

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (12/2008)	Cost To Date (11/2008)	Cost Forecast (12/2008)	Variance
a	b	c	d = b + c	e	f	g = f - d
East Span - SAS E2 / T1 Foundations						
Capital Outlay Support	52.5	(21.5)	31.0	28.3	31.0	-
Capital Outlay Construction	313.5	(32.6)	280.9	275.0	280.9	-
TOTAL	366.0	(54.1)	311.9	303.3	311.9	-

Note: Details may not sum to totals due to rounding effects.

SAS E2/T1 Foundations Schedule Summary

Contract	AB 144/SB 66 Contract Completion Baseline (07/2005)	Approved Changes (Months)	Contract Complete Current Approved Schedule (12/2008)	Contract Complete Schedule Forecast (12/2008)	Schedule Variance (Months)
East Span - SAS E2 / T1 Foundations	June 2008	(5)	January 2008	January 2008	-

Contract Status:

- The SAS E2/T1 Marine Foundations Contract was completed and accepted by Caltrans on January 18, 2008. With completion of this contract, all foundations for the SAS have now been completed.

Contract Issues: None.

Recent TBPOC Actions: None.



(11.1) SAS E2

Toll Bridge Seismic Retrofit Program

San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project

► SELF-ANCHORED SUSPENSION (SAS) SUPERSTRUCTURE CONTRACT

Contract Description: The Self-Anchored Suspension (SAS) Superstructure contract constructs a signature tower span between the Skyway and the Yerba Buena Island transition structure. Work on the SAS bridge has been split between three contracts—the SAS Superstructure (under construction), the SAS E2/T1 Foundation (completed), and the SAS W2 Foundation (completed).

SAS Superstructure Cost Summary (\$ Millions)

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (12/2008)	Cost To Date (11/2008)	Cost Forecast (12/2008)	Variance
a	b	c	d = b + c	e	f	g = f - d
East Span - SAS Superstructure						
Capital Outlay Support	214.6	-	214.6	116.1	214.6	-
Capital Outlay Construction	1,753.7	-	1,753.7	575.4	1,767.4	13.7
TOTAL	1,968.3	-	1,968.3	691.5	1,982.0	13.7

Note: Details may not sum to totals due to rounding effects.

SAS Superstructure Schedule Summary

Contract	AB 144/SB 66 Contract Completion Baseline (07/2005)	Approved Changes (Months)	Contract Complete Current Approved Schedule (12/2008)	Contract Complete Schedule Forecast (12/2008)	Schedule Variance (Months)
East Span - SAS Superstructure	March 2012	12	March 2013	March 2013	-

Contract Status:

- Ongoing field and marine work includes the construction of the permanent bent and pier caps at W2 and E2 and erection of temporary structures that will support the steel bridge deck of the SAS structure during construction. A labor dispute arose in December 2008 involving the off-loading of the temporary structures from a ship while tied off to the job site dock. The dispute was tentatively resolved to allow for off-loading of the ship in the middle of the bay. The contractor and the TBPOC are working to resolve the dispute for future shipments. Completion of foundations for the temporary structures is expected in the summer of 2009.
- Various portions of the bridge are under fabrication around the world. Zhenhua Port Machinery Company (ZPMC), of Shanghai, China has been subcontracted to supply and fabricate all the major steel elements of the SAS. Caltrans has audited the ZPMC facilities and has organized quality assurance resources in China that will ensure an effective owner's presence in the steel fabrication shops. While significant progress has been made on the decks and towers, the SAS contractor has stated that the fabrication schedule for the roadway boxes is behind schedule. The contractor and the TBPOC have negotiated a tentative agreement to accelerate the work. The agreement is expected to be finalized in the first quarter of 2009. The cost for this agreement is within the contract contingency set aside for these types of issues and should not affect the program contingency or budget. The TBPOC and contractor continue to evaluate options to accelerate the project. The first shipment of steel roadway boxes are expected by the third quarter of 2009.

- A large barge-mounted crane needed to erect the new bridge has been completed and will arrive in the Bay Area in February 2009.

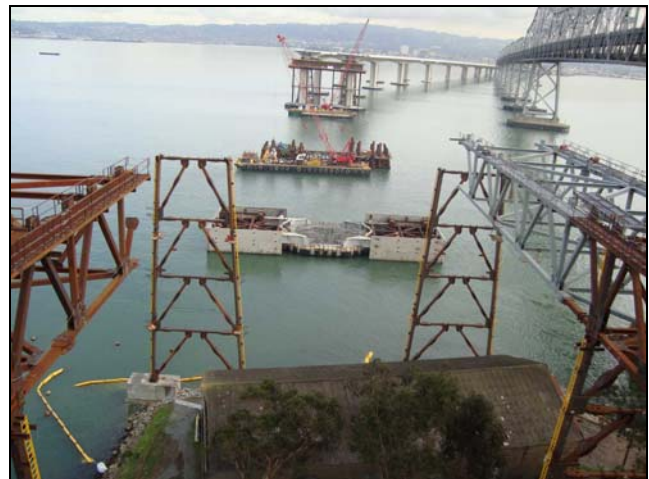
Contract Issues:

Issue	Mitigating Action
The SAS contractor has stated that the fabrication schedule for the Orthotropic Box Girder (OBG) is behind schedule. While not yet on the critical path for the project, this delay may increase and result in additional cross-impacts to the corridor schedule.	The contractor and the TBPOC have negotiated a tentative agreement to accelerate the work. The agreement is expected to be finalized in the first quarter of 2009.

Recent TBPOC Actions: None.



(13.1) Bearing Hold Downs & Top Housing Castings in China



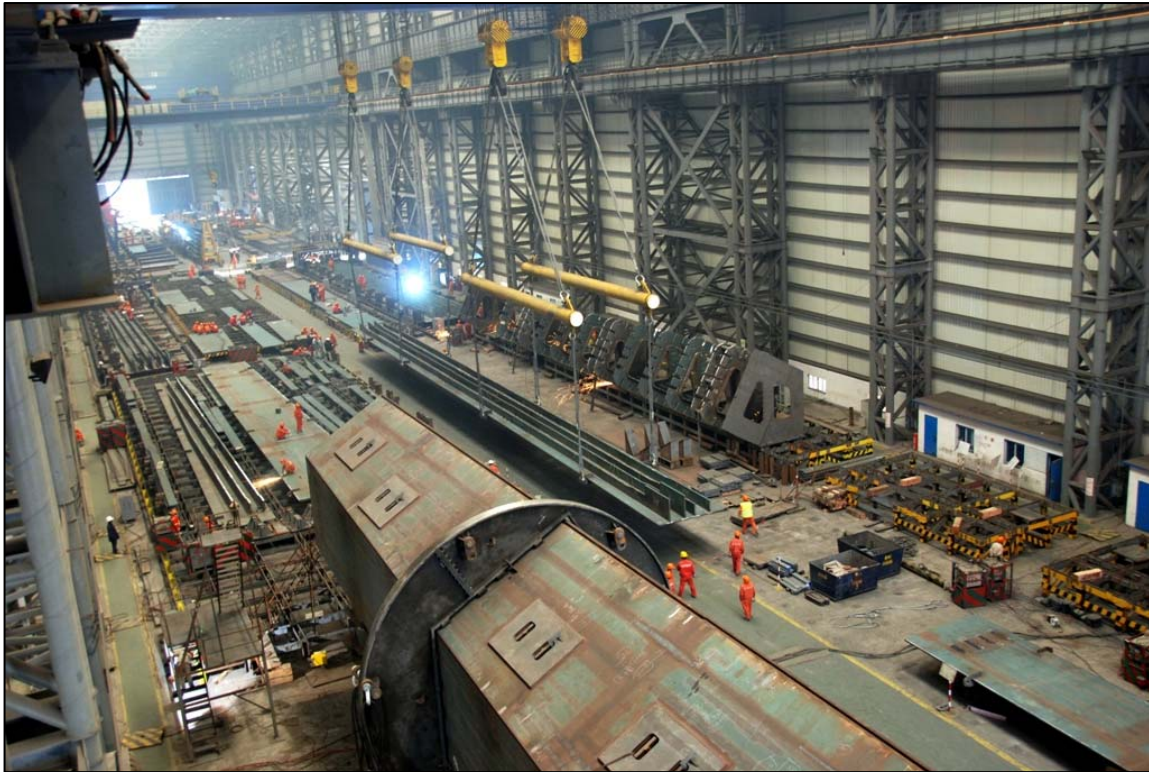
(13.2) Temporary Truss Erection



(13.3) Shear Leg Crane Barge



(13.4) T1 Saddle

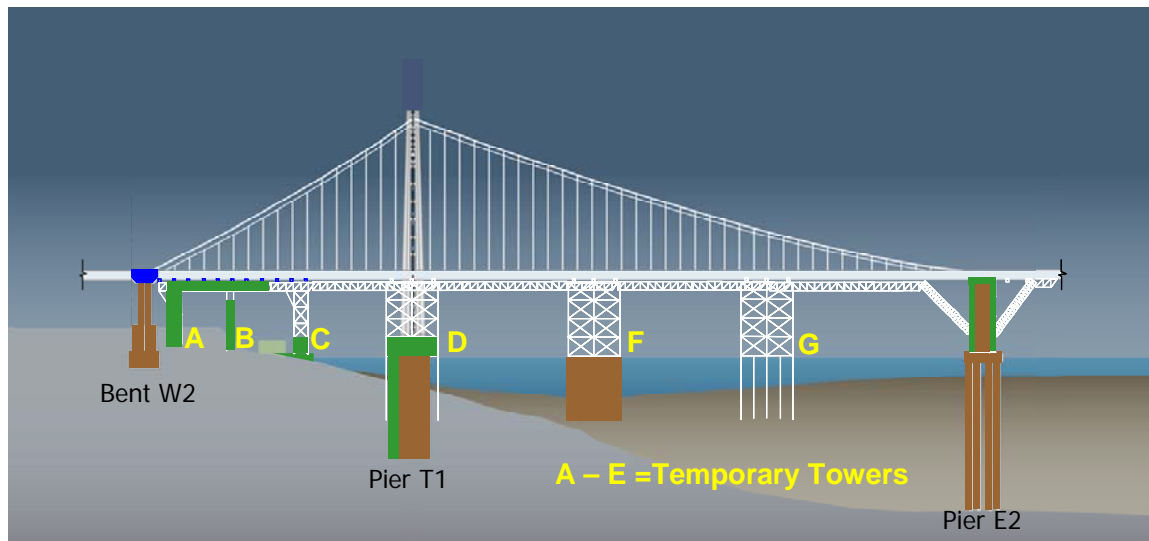
Contract Photographs from Changxing Island, China




(14.1) Tower Fabrication Shop 1



(14.2) Tower Fabrication Shop 2

SAS Superstructure Fieldwork Construction Progress



-  SAS field work to be completed
-  SAS field work in progress
-  Completed field work under prior W2 and W2/T1 contracts



(15.1) First Completed Deck Section

Toll Bridge Seismic Retrofit Program

San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project

► YERBA BUENA ISLAND DETOUR (YBID)

Contract Description: The YBI Detour constructs a temporary detour from the YBI tunnel to the existing east span of the Bay Bridge. This detour maintains traffic on the existing bridge while the YBI Transition Structure Contract completes the tie-in from the SAS to the existing tunnel.

YBI Detour Cost Summary (\$ Millions)

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (12/2008)	Cost To Date (11/2008)	Cost Forecast (12/2008)	Variance
a	b	c	d = b + c	e	f	g = f - d
YBI Detour						
Capital Outlay Support	29.4	36.6	66.0	52.7	66.0	-
Capital Outlay Construction	132.0	310.2	442.2	249.9	461.2	19.0
TOTAL	161.4	346.8	508.2	302.6	527.2	19.0

Note: Details may not sum to totals due to rounding effects.

YBI Detour Schedule Summary

Contract	AB 144/SB 66 Contract Completion Baseline (07/2005)	Approved Changes (Months)	Contract Complete Current Approved Schedule (12/2008)	Contract Complete Schedule Forecast (12/2008)	Schedule Variance (Months)
YBI Detour*	July 2005	40	June 2010	June 2010	-

* Contract schedule under assessment. See Contract Issues on the following page.

Contract Status:

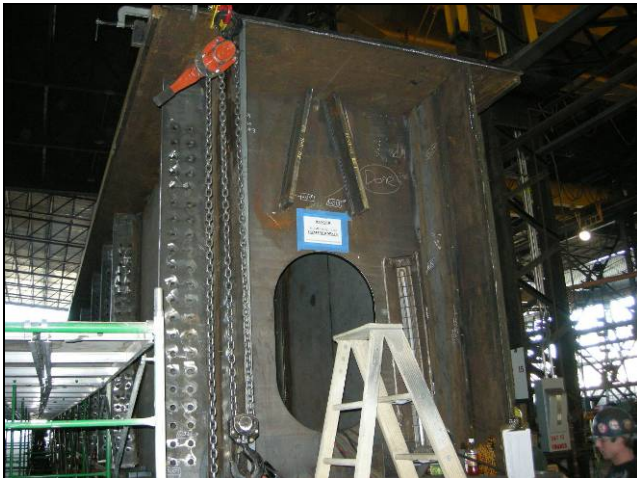
- The TBPOC has approved a number of scope and schedule changes to better time the opening of the detour with the current revised project schedule. Along with pacing the construction of the detour bridge for an opening in mid to late 2009, select bridge work for the Yerba Buena Island transition structures was advanced on the detour contract to minimize construction schedule delay risks from construction delays on bridge foundations.
- The detour viaduct construction continues with erection of the west tie-in and viaduct structures and fabrication of the east tie-in roll-in viaduct and support structures (see photos on the following page).
- The east tie-in to the existing bridge support foundation system is currently being constructed on Yerba Buena Island, while fabrication of the roll-in structures (skid beams and truss) has started in Arizona and Washington. The east tie-in field work is 45% complete as of December 2008.
- The advanced work on the substructures foundations and columns (see photo #17.4). On the Yerba Buena Island Transition contract is continuing. As of December 2008, 62% of the advanced work has been completed.

Recent TBPOC Actions: None.

Contract Issues: None.

Issue	Mitigating Action
Caltrans will need to negotiate a number of contract change orders to implement the aforementioned changes to the contract.	The TBPOC has approved a plan of action to implement the changes. Caltrans is currently negotiating outstanding contract changes.

Contract Photographs



(17.1) Fabrication of Temporary Steel Support Structures for YBI Detour



(17.2) Fabrication of Temporary Steel Support Structures for YBI Detour



(17.3) Fabrication of Temporary Steel Support Structures for YBI Detour



(17.4) Fabrication of Temporary Steel Support Structures for YBI Detour

Toll Bridge Seismic Retrofit Program

San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project

► YBI TRANSITION CONTRACTS (YBITS)

Contract Description: The YBI Transition Structure contracts will construct the mainline YBI Transition Structures (YBITS) that will connect the SAS portion of the new bridge to the newly rolled in WTI Phase I structure. YBITS #1 will construct the mainline approach structure from the new bridge to the WTI Phase I structure. YBITS #2 will demolish the YBI Detour temporary structure, complete the new eastbound on-ramp, reconstruct local affected facilities at YBI and complete the bike path from the SAS to YBI (except for a section of the path that conflicts with existing column E1). That section of the path is contemplated to be completed in the demolition contract. A YBI landscaping contract will restore slopes and vegetation in areas affected by the YBI construction.

YBI Transition Structure Cost Summary (\$ Millions)

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (12/2008)	Cost To Date (11/2008)	Cost Forecast (12/2008)	Variance
a	b	c	d = b + c	e	f	g = f - d
Capital Outlay Support	78.7	-	78.7	22.4	78.7	-
Capital Outlay Construction	-	-	-	-	-	-
YBITS Contract #1	-	-	-	-	-	-
YBITS Contract #2	-	-	-	-	-	-
YBITS Contract #3 - Landscape	-	-	-	-	-	-
Total Capital Outlay Construction	299.3	(23.2)	276.1	-	276.1	-
TOTAL	378.0	(23.2)	354.8	22.4	354.8	-

Note: Details may not sum to totals due to rounding effects.

YBI Transition Structure Schedule Summary

Contract	AB 144/SB 66 Contract Completion Baseline (06/2005)	Approved Changes (Months)	Contract Complete Current Approved Schedule (12/2008)	Contract Complete Schedule Forecast (12/2008)	Schedule Variance (Months)
YBI Transition Structure	November 2013	12	November 2014	November 2014	-

Contract Status:

- The Yerba Buena Transition Structure #1 contract was advertised in August 2008. Caltrans held a contractor's outreach for the contract in September 2008. An addendum was issued on October 24, 2008 to change the bid opening date from January 13, 2009 to July 13, 2009.
- The remaining Yerba Buena Island bridge contracts will be advertised at a later date per the project schedule requirement.
- Some foundations and columns for the transition structure are currently being installed by the YBID contract (see **photos #19.1 through #19.4 and the Project Progress Diagram in Appendix D**).

Contract Issues: None.

Recent TBPOC Actions: None.

Contract Photographs



(19.1) YBITS TT CE Framing



(19.2) YBITS Span 50 Upper Deck Rebar Installation



(19.3) YBITS ETI Crane Runway Trestle



(19.4) YBITS and SAS Looking East

Toll Bridge Seismic Retrofit Program

San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project

► OAKLAND TOUCHDOWN CONTRACTS

Contract Descriptions: The Oakland Touchdown #1 contract includes construction of all marine foundations and land foundations (except for the eastbound abutment), westbound bridge section, and one frame of the eastbound bridge section and roadway approach for the section connecting the new Skyway portion to the roadway west of the Oakland Toll Plaza. The Oakland Touchdown #2 Contract includes construction of the remaining eastbound bridge section and roadway approach for the section connecting the new Skyway portion to the roadway west of the Oakland Toll Plaza. This work would occur once the westbound traffic is shifted onto the new westbound bridge, including the SAS. The Submarine Cable Relocation Contract replaced the existing submarine electrical cable from Oakland to Treasure Island and was completed ahead of the OTD Contract #1, which avoided potential construction conflicts.

Oakland Touchdown Cost Summary (\$ Millions)

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (12/2008)	Cost To Date (11/2008)	Cost Forecast (12/2008)	Variance
a	b	c	d = b + c	e	f	g = f - d
Capital Outlay Support	74.4	-	74.4	47.2	92.1	17.7
Capital Outlay Construction	-	-	-		-	-
OTD Submarine Cable	-	-	-	7.8	9.6	-
Oakland Touchdown #1	-	-	-	127.2	226.5	-
Oakland Touchdown #2	-	-	-	-	62.0	-
Oakland Touchdown Electrical	-	-	-	-	4.4	-
Total Capital Outlay Construction	283.8	-	283.8	135.0	303.5	18.7
TOTAL	358.2	-	358.2	182.2	394.6	36.4

Note: Details may not sum to totals due to rounding effects. The allocation of AB144/SB 66 budgets is proceeding. Budget amount is TBD. Overall OTD budgets and forecasts are shown on page 2.

Oakland Touchdown Schedule Summary

Contract	AB 144/SB 66 Contract Completion Baseline (6/2005)	Approved Changes (Months)	Contract Complete Current Approved Schedule (12/2008)	Contract Complete Schedule Forecast (12/2008)	Schedule Variance (Months)
OTD Submarine Cable	-	-	January 2008	January 2008	-
Oakland Touchdown #1	-	-	May 2010	May 2010	-
Oakland Touchdown #2	-	-	November 2014	November 2014	-

Contract Status

- The Oakland Touchdown #1 contract was 68% completed based on the expended value of the contract as of the end of December 2008 (see progress diagram in Appendix E).
- On the westbound approach bridge, the contractor has completed all foundation work and is now proceeding on the soffit deck for the superstructure. Installation of reinforcing steel on the deck started with the concrete pour scheduled by the end of December 2008.
- Work is ongoing on the foundation and columns for the eastbound approach bridge (see photo #'s 21.1 through 21.4 on the facing page).
- Foundation work for the new mole substation has been completed and manhole and conduit installation has begun.
- The submarine cable relocation contract was completed in January 2008. The Oakland Touchdown #2 contract is in design and will be advertised at a later date per the project schedule.

Recent TBPOC Actions: In November 2008, the TBPOC approved to extend the contract completion to May 2010 due to delays in integrated shop drawings. This project is not on the critical path for opening the new bridge and the delay to project completion did not impact the corridor schedule.

Issue	Mitigating Action
Due to delays with integrated shop drawings, there is a potential delay of six months to completion of the contract.	This contract is not on the critical path schedule for opening the new bridge and any delay would not impact the corridor schedule. Caltrans and the contractor are discussing delay costs and investigating mitigation measures.

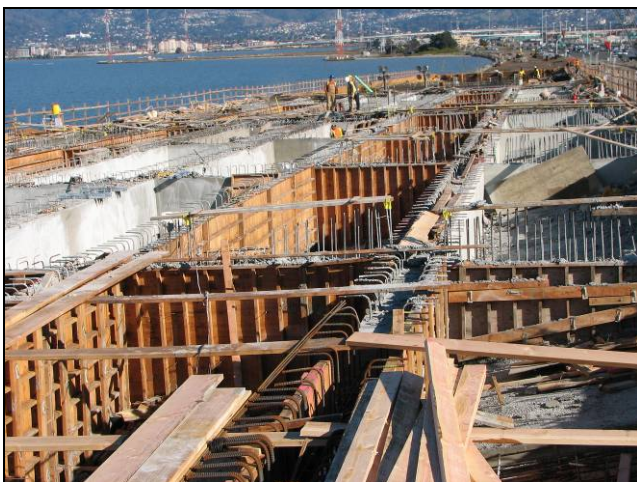
Contract Photographs



(21.1) OTD1 Column E18R



(21.2) OTD1 Column E17R



(21.3) OTD1 Frame Concrete



(21.4) OTD1 Column E22R Piles Driven

Toll Bridge Seismic Retrofit Program

San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project

► OTHER CONTRACTS

Contract Descriptions: Other major contracts include the Stormwater Treatment Measures contract, which implements best practices for storm water runoff treatment at the SFOBB toll plaza and approaches to the SFOBB toll plaza, and the Existing Bridge Demolition contract, which implements the complete removal of the existing 1936 east span following the opening of the new bridge.

Other Major Contracts Cost Summary (\$ Millions)

Contract	AB 144 / SB 66 Budget (6/2005)	Approved Changes	Current Approved Budget (12/2008)	Cost To Date (11/2008)	Cost Forecast (12/2008)	Variance
a	b	c	d = b + c	e	f	g = f - d
Capital Outlay Support	85.7	2.0	87.7	8.4	87.7	-
Capital Outlay Construction	-	-	-	-	-	-
Existing Bridge Demolition	239.2	-	239.2	-	222.0	(17.2)
Stormwater Treatment Measures	15.0	3.3	18.3	16.6	18.3	-
Total Capital Outlay Construction	254.2	3.3	257.5	16.6	240.3	(17.2)
TOTAL	339.9	5.3	345.2	25.0	328.0	(17.2)

Note: Details may not sum to totals due to rounding effects.

Other Major Contracts Schedule Summary

Contract	AB 144/SB 66 Contract Completion Baseline (07/2005)	Approved Changes (Months)	Contract Complete Current Approved Schedule (12/2008)	Contract Complete Schedule Forecast (12/2008)	Schedule Variance (Months)	% Design Comp.
Existing Bridge Demolition	September 2014	12	September 2015	September 2015	-	10
Stormwater Treatment Measures	March 2008	-	March 2008	March 2008	-	N/A

Contract Status:

Stormwater Treatment Measures: The contract was accepted in December 2007.

Bridge Demolition: Design work has been temporarily suspended to assign engineering resources to higher priority tasks, and will resume at a later time. The contract schedule completion date has been extended by 12 months due to a 12-month SAS contract extension. The \$17.2 million decrease in construction costs for the Existing Bridge Demolition contract is due to a re-evaluation of cost escalation rates for the contract.

Contract Issues: None.

Recent TBPOC Actions: None

Toll Bridge Seismic Retrofit Program

San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project

► OTHER COMPLETED CONTRACTS AND RELATED WORK

Summary Description: Substantial work has already been performed on the SFOBB East Span Replacement project to facilitate construction of the mainline construction contracts.

Other Contracts and Related Work Cost Summary (\$ Millions)

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (12/2008)	Cost To Date (11/2008)	Cost Forecast (12/2008)	Variance
a	b	c	d = b + c	e	f	g = f - d
Capital Outlay Support	227.0	(1.0)	226.0	209.0	226.0	-
Right-of-Way and Environmental Mitigation	72.4	-	72.4	39.3	72.4	-
Capital Outlay Construction	-	-	-	-	-	-
SAS W2 Foundations	26.4	-	26.4	25.8	26.4	-
YBI/SAS Archaeology	1.1	-	1.1	1.1	1.1	-
YBI - USCG Road Relocation	3.0	-	3.0	2.8	3.0	-
YBI - Substation and Viaduct	.6	-	11.6	11.3	11.6	-
Oakland Geofill	8.2	-	8.2	8.2	8.2	-
Pile Installation Demonstration Project	9.2	-	9.2	9.2	9.2	-
Existing East Span Retrofit	30.8	-	30.8	30.8	30.8	-
Total Capital Outlay Construction Completed	90.3	-	90.3	89.2	90.3	-
TOTAL	389.7	(1.0)	388.7	337.5	388.7	-

Note: Details may not sum to totals due to rounding effects.

Other Contracts and Related Work Schedule Summary

Project	Actual Project Completion Date
Existing East Span Retrofit	March 1998
Interim Retrofit	July 2000
Pile Installation Demolition Project	December 2000
YBI / SAS Archaeology	January 2003
Oakland Geofill	April 2003
YBI - USCG Road Relocation	June 2004
SAS W2 Foundations	October 2004
YBI Substation and Viaduct	May 2005

Summary Status:

- Construction has been completed on the above-listed contracts. Caltrans continues to work with various environmental agencies to conduct compliance inspections and monitor and mitigate any environmental impacts from the project.

Contract Issues: None.

Recent TBPOC Actions: None.

Toll Bridge Seismic Retrofit Program

San Francisco-Oakland Bay Bridge (SFOBB) West Approach Replacement Project

Project Description: The SFOBB West Approach Replacement Project will replace the entire west approach structure from 5th Street to the west anchorage of the existing west spans of the SFOBB while maintaining existing traffic lanes for the weekday commute.

SFOBB West Approach Replacement Cost Summary (\$ Millions)

Project	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (12/2008)	Cost To Date (11/2008)	Cost Forecast (12/2008)	Variance
a	b	c	d = b + c	e	f	g = f - d
West Approach						
Capital Outlay Support	120.0	-	120.0	111.9	120.0	-
Capital Outlay Construction	309.0	41.7	350.7	302.5	350.7	-
TOTAL	429.0	41.7	470.7	414.4	470.7	-

Note: Details may not sum to totals due to rounding effects.

SFOBB West Approach Replacement Schedule Summary

Project	AB 144/SB 66 Project Completion Baseline (07/2006)	Approved Changes (Months)	Project Complete Current Approved Schedule (12/2008)	Contract Complete Schedule Forecast (12/2008)	Schedule Variance (Months)
West Approach	August 2009	(7)	January 2009	January 2009	-
Open-to-Traffic Date: Mainline Realignment			April 2008	April 2008	-

Project Status:

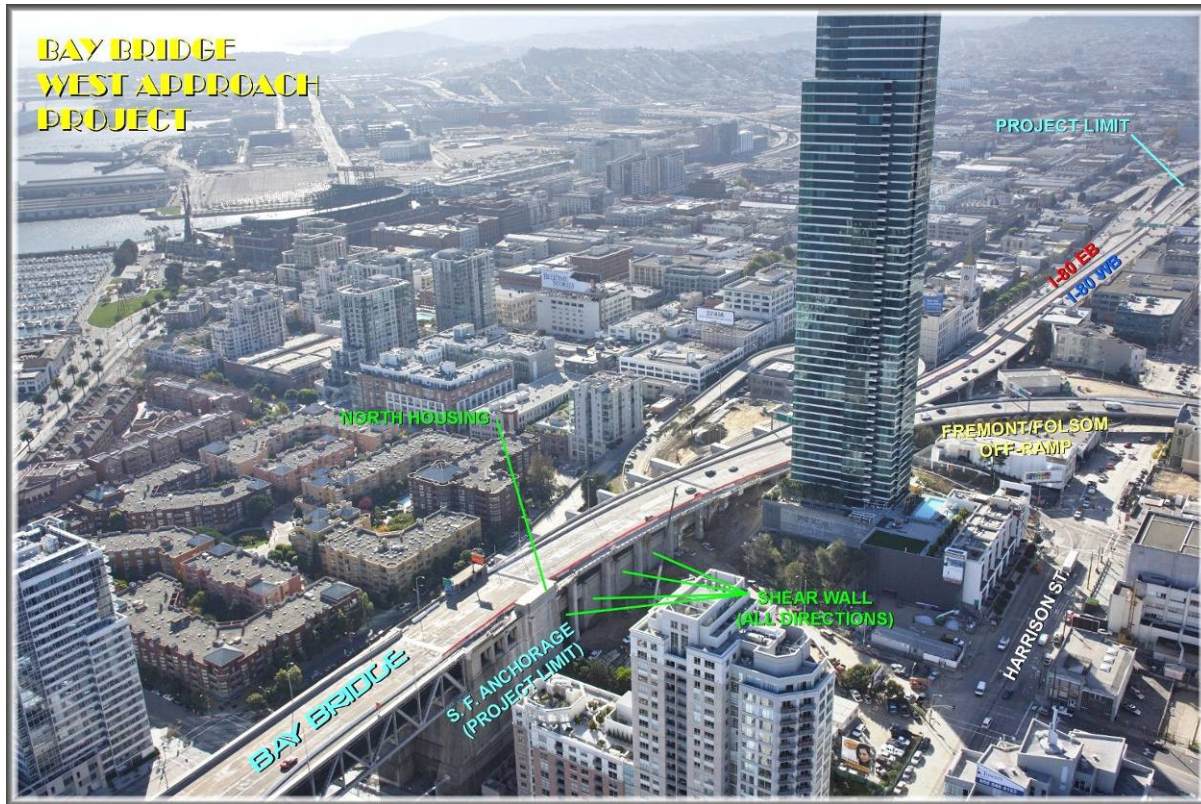
- Caltrans certified seismic safety for the West Approach structures ahead of schedule on December 22, 2008. Caltrans and its contractor will be completing final closeout and punchlist work on the contract through the first quarter of 2009. The Sterling Street eastbound on-ramp opened on its final alignment in November 2008 and the Harrison Street westbound off-ramp will be reopened by February 2009. On December 22, 2008, Caltrans certified that seismic safety was achieved for the West Approach structures.
- The TBPOC revised the overall project budget to \$470.7 million during the fourth quarter of 2008 to cover final project close-out costs and costs associated with achieving early project completion, while minimizing impacts to the public and remaining construction risk. Savings from the sale of excess project right-of-way upon project completion will be available later to offset project costs. The overall project budget and forecast remains within the overall TBSRP program contingency capacity and will result in no change to the overall program budget.

Project Issues: None.

Contract Issues: None.

Recent TBPOC Actions: In November 2008, the TBPOC approved a budget change and supplemental allocation of \$17 million to the project to fund final close-out costs. BATA approved an equal action in December 2008 for the project.

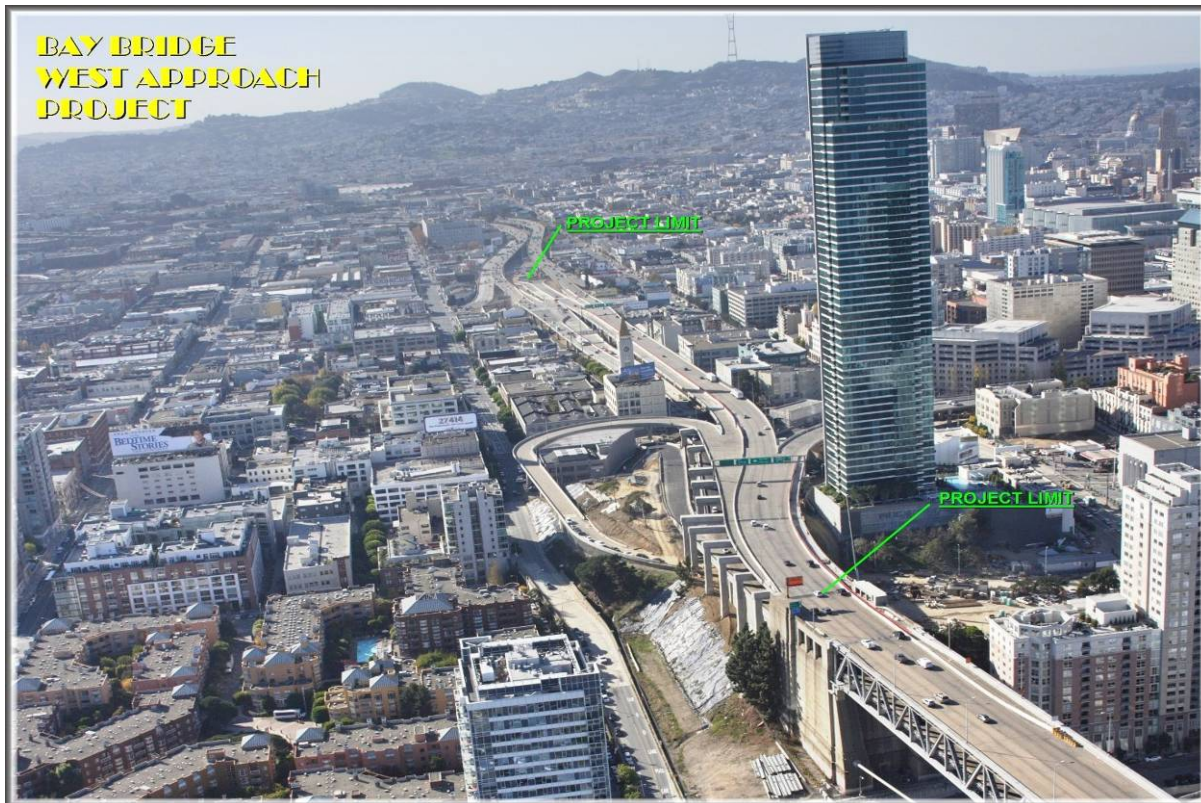
Contract Photographs



(25.1) The Bay Bridge West Approach Demolition Progress



(25.2) The Bay Bridge West Approach

Contract Photographs (Cont.)

(26.1) The Bay Bridge West Approach Project



(26.2) Aerial Photographs of the West Approach Project

Toll Bridge Seismic Retrofit Program

Other Completed Seismic Retrofit Projects

Summary Description: Caltrans has already completed the seismic retrofits of the West Spans of the SFOBB, the existing 1958 Carquinez Bridge, the existing Benicia-Martinez Bridge, the San Mateo-Hayward Bridge, the Richmond-San Rafael Bridge, and two former toll bridges in Southern California.

Other Completed Seismic Retrofit Projects Cost Summary (\$ Millions)

Project	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (12/2008)	Cost To Date (11/2008)	Cost Forecast (12/2008)	Variance
a	b	c	d = b + c	e	f	g = f - d
San Francisco-Oakland Bay Bridge West Span Seismic Retrofit Project	307.9	-	307.9	302.0	307.9	-
Carquinez Bridge Retrofit Project	114.2	-	114.2	114.2	114.2	-
Benicia-Martinez Bridge Retrofit Project	177.8	-	177.8	177.8	177.8	-
San Mateo-Hayward Bridge Retrofit Project	163.5	-	163.5	163.4	163.5	-
Vincent Thomas Bridge Retrofit Project	58.5	-	58.5	58.4	58.5	-
San Diego-Coronado Bridge Retrofit Project	103.5	-	103.5	102.6	103.5	-
Richmond San Rafael Bridge (RSRB) Seismic Retrofit Project	914.0	(97.5)	816.5	794.8	816.5	-
TOTAL	1,839.4	(97.5)	1,741.9	1,713.2	1,741.9	-

Note: Details may not sum to totals due to rounding effects. Capital Outlay Support and Capital Outlay have been combined.

Other Completed Seismic Retrofit Projects Schedule Summary

Project	Actual Project Completion Date
Vincent Thomas Bridge Retrofit	May 2000
San Mateo-Hayward Bridge Retrofit	June 2000
Carquinez Bridge Retrofit	January 2003
San Diego-Coronado Bridge Retrofit	June 2003
Benicia-Martinez Bridge Retrofit	August 2003
SFOBB West Span Seismic Retrofit	June 2004
RSRB Seismic Retrofit	August 2005

Summary Status: The budget and cost forecast amounts shown above include allowances for minor project closeout costs.

Contract Issues: None.

Recent TBPOC Actions: None.

Toll Bridge Seismic Retrofit Program

Other Toll Bridges

The Dumbarton Bridge

State Route 84 crosses the southern region of San Francisco Bay between the cities of Newark to the east and East Palo Alto to the west (see photo #29.1). The route consists of three lanes in each direction and an eight-foot bicycle/pedestrian lane. The annual average daily traffic (AADT) of the route is near 60,000. The bridge is over 2 km in length and is positioned in an approximately normal geometry between two seismic faults. The



(28.1) The Dumbarton Bridge

United States Geological Survey (USGS) reports that the San Andreas Fault, some 15 km to the west of the bridge, and the Hayward Fault, some 13 km to the east of the bridge, pose most of the significant seismic threat to the San Francisco Bay Area.

History

In late 2004, Caltrans initiated limited vulnerability studies of the Antioch Bridge and the Dumbarton Bridge. These studies were completed in May 2005. Based on the vulnerability studies and a follow-up sensitivity analysis, Caltrans and BATA developed a work plan to refine the seismic analysis and to assess the required performance levels of each structure, including new geotechnical analysis. In June 2006, BATA approved \$17.8 million in toll bridge rehabilitation funding to proceed with the comprehensive seismic analysis of the bridges. In September 2006, BATA entered into a consultant contract to conduct geotechnical and geophysical investigations, which have been ongoing since December 2006. Based on the analysis, Caltrans determined that the Dumbarton and Antioch bridges require seismic retrofit.

A strategy meeting took place on August 22, 2008 for both projects and consensus by the project teams recommended retrofit strategies for both bridges. Both the Dumbarton and Antioch Bridge seismic retrofit strategies include installation of isolation bearings and strengthening of the piers above the water line. The Dumbarton Bridge retrofit strategy also includes superstructure and deck modifications and additional strengthening of the over-land approach slab structures. The Antioch Bridge retrofit strategy includes relatively minor modifications to the approach structure on Sherman Island. It was concluded at this meeting that foundation retrofit is not required for either bridge. The design teams presented their proposed strategy schemes and the results of their analysis to the Toll Bridge Seismic Safety Peer Review Panel on September 24, 2008.

Progress This Quarter

The design teams continuing advancement of the design and estimates based on the retrofit strategies. Risk management meetings were held on September 23, 2008 to discuss the risks associated with the retrofit strategy for each bridge. The design teams are continuing to meet with the appropriate regulatory agencies to discuss the scope of work and the schedules, as well as, the environmental issues affecting both bridges.

Project specific design criteria for the Dumbarton Bridge retrofit project was supported by laboratory testing of a large scale mock-up (1/3 actual size, see photo # 29.1).

At the December 17, 2008 BATA meeting, a presentation was made updating the Authority on the Dumbarton and Antioch seismic retrofit evaluations and included the most recent schedules and cost projections. A total cost estimate of \$950 million for both projects was presented with construction contracts for both bridges being awarded in 2010 and completed in 2012 (Antioch) and 2013 (Dumbarton).

The environmental process is continuing for both projects and once the design/retrofit strategy is completed, all the permit applications will be submitted to the appropriate agencies for their approval.
(See schedule in on page 30).



(29.1) Dumbarton Specimen at Testing Laboratory



PROJECT / CONTRACT REPORTS

Regional Measure 1 Program

New Benicia-Martinez Bridge Project Summary

- New Benicia-Martinez Bridge Contract
- Other Contracts and Related Project Activities

Interstate 880 State Route 92 Interchange Reconstruction

Other Completed Regional Measure 1 Projects

- San Mateo–Hayward Bridge Widening Project
- Richmond Parkway Project
- Bayfront Expressway Widening Project
- Richmond-San Rafael Bridge Trestle, Fender, and Deck Joint Rehabilitation Project
- Richmond-San Rafael Bridge Deck Overlay Project
- New Carquinez Bridge Project

Regional Measure 1 Program

New Benicia-Martinez Bridge Project Summary

Project Description: The new Benicia-Martinez Bridge Project has constructed a new parallel bridge just east of the existing bridge. The project includes reconstructed interchanges to the north and south of the bridges and a new toll plaza and administration building in Martinez.

New Benicia-Martinez Bridge Project Cost Summary (\$ Millions)

Contract	BATA Budget (07/2005)	Approved Changes	Current Approved Budget (12/2008)	Cost To Date (11/2008)	Cost Forecast (12/2008)	Variance
a	b	c	d = b + c	e	f	g = f - d
Capital Outlay Support	157.1	35.2	192.3	184.6	192.3	-
Right-of-Way and Others	20.4	(0.1)	20.3	16.9	20.3	-
Capital Outlay	-	-	-	-	-	-
New Bridge	672.0	94.6	766.6	763.8	766.6	-
I-680/I-780 Interchange Replacement	76.3	26.9	103.2	98.8	103.2	-
I-680/Marina Vista Interchange Reconstruction	51.5	4.9	56.4	56.1	56.4	-
New Toll Plaza	24.3	2.0	26.3	23.5	26.3	-
Existing Bridge & Interchange Modifications	17.2	42.3	59.5	17.9	59.5	-
Other	20.3	2.8	23.1	15.8	23.1	-
Project Reserve	20.8	4.0	24.8	-	24.8	-
TOTAL	1,059.9	212.6	1,272.5	1,177.4	1,272.5	-

Note: Details may not sum to totals due to rounding effects.

The budget and estimate at completion includes approximately \$33 million in non-toll bridge funds (Proposition 192 and SHOPP).

New Benicia-Martinez Bridge Project Schedule Summary

Contract	BATA Contract Completion Baseline (07/2005)	Approved Changes (Months)	Contract Complete Current Approved Schedule (12/2008)	Contract Complete Schedule Forecast (12/2008)	Schedule Variance (Months)
New Bridge Open to Traffic	December 2007	-	August 2007	August 2007	-
Existing Bridge & Interchange Modifications	December 2009	-	December 2009	October 2009	(2)

Project Status:

- The new northbound bridge was opened to traffic in August 2007.
- On the New Benicia-Martinez Bridge Project, work to modify the old southbound I-680 bridge to add an additional traffic lane and bicycle/pedestrian lane is proceeding ahead of schedule. Caltrans is forecasting the work to be complete two months early in October 2009.
- The existing bridge (southbound) and interchange modification contract was 59% complete based on the expended value of the contract as of the end of December 2008.
- Stage 1 of the contract completed the removal of the old toll plaza, and repair of the bridge deck and roadway undulations on the east side of the existing bridge and south approach. Southbound traffic was realigned to the east side of the existing bridge for the start of Stage 2 work (see photos # 32.1 through #32.4).

Project Issues: None.

Recent TBPOC Actions: None.

Contract Photographs



(32.1) Deck Repairs



(32.2) Deck Repairs



(32.3) Deck Repairs



(32.4) Demolition of Abandoned Structure

Regional Measure 1 Program

Interstate 880/State Route 92 Interchange Reconstruction Project

Project Description: Modify the existing cloverleaf interchange to increase capacity and improve safety and traffic operations.

Interstate 880/State Route 92 Interchange Cost Summary (\$ Millions)

Contract	BATA Budget (07/2005)	Approved Changes	Current Approved Budget (12/2008)	Cost To Date (11/2008)	Cost Forecast (12/2008)	Variance
a	b	c	d = b + c	e	f	g = f - d
I-880/SR-92 Interchange Improvement						
Capital Outlay Support	28.8	26.2	55.0	43.9	55.0	-
Capital Outlay Construction	94.8	60.2	155.0	49.6	155.0	-
Capital Outlay Right-of-Way	9.9	7.0	16.9	11.6	16.9	-
Project Reserve	0.3	17.8	18.1	-	18.1	-
TOTAL	133.8	111.2	245.0	105.1	245.0	-

Note: Details may not sum to totals due to rounding effects. \$9.6 million in ACTA funds included under Capital Outlay Construction. \$3.0 million included in Capital Outlay Construction and \$1.0 million in Capital Outlay Support for separate landscape contract.

Interstate 880/State Route 92 Interchange Schedule Summary

Project	BATA Project Completion Baseline (07/2005)	Approved Changes (Months)	Project Complete Current Approved Schedule (12/2008)	Contract Complete Schedule Forecast (12/2008)	Schedule Variance (Months)
I-880/SR-92 Interchange Reconstruction	December 2010	-	June 2011	June 2011	-

Project Status:

- The project is 41% complete based on the expended value of the contract as of December 20, 2008.
- On the new eastbound SR-92 to northbound I-80 flyover structure, all foundations have been completed. Work is now proceeding onto the flyover superstructure. A number of concrete pours to complete the bridge deck and barrier are scheduled through January 2009, pending weather.
- Other ongoing work includes the construction of various retaining and soundwalls throughout the project limits, construction of a new pedestrian overcrossing of I-880 at Eldridge Avenue and widening of SR-92 at Mount Eden. Paving operations continue on various areas of the job. The Hesperian Boulevard on-ramp to eastbound SR-92 was opened October 31, 2008.
- The westbound SR-92 to southbound I-880 connector bridge has started and the first foundation has been poured.

Project Issues: None.

Contract Issues: None.

Recent TBPOC Actions: None.

Contract Photographs

(34.1) SR-92/880 Construction Progress



(34.2) Aerial of I880/SR92

Project Photographs

(35.1) Interstate 880/State Route 92 Interchange - October 2008



(35.2) Interstate 880/State Route 92 Interchange – At Completion

Regional Measure 1 Program

Other Completed Regional Measure 1 (RM1) Projects

Summary Description: Other completed Regional Measure 1 projects are the following: (a) Widen the San Mateo-Hayward Bridge along its low-trestle section and its eastern approach; (b) Widen the Bayfront Expressway (SR-84) from the Dumbarton Bridge to the U.S. 101/Marsh Road interchange; (c) Construct an eastern approach (Richmond Parkway) between the Richmond-San Rafael Bridge and Interstate 80 near Pinole; (d) Modify the U.S. 101/University Avenue interchange; (e) Richmond-San Rafael Bridge Trestle, Fender and Deck Joint Rehabilitation Project; (f) Richmond-San Rafael Bridge Deck Overlay Project; (g) Construct a new suspension bridge with four westbound lanes and a bicycle/pedestrian lane west of the existing Carquinez Bridge and demolition of the existing 1927 bridge.

Other Completed RM1 Projects Cost Summary (\$ Millions)

Contract	BATA Budget (07/2005)	Approved Changes	Current Approved Budget (12/2008)	Cost To Date (11/2008)	Cost Forecast (12/2008)	Variance
a	b	c	d = b + c	e	f	g = f - d
San Mateo-Hayward Bridge Widening Project	217.8	-	217.8	208.7	211.9	(5.9)
Bayfront Expressway Widening Project	36.1	-	36.1	33.4	36.0	(0.1)
Richmond Parkway Project	5.9	-	5.9	4.3	5.9	-
U.S. 101/University Interchange	3.8	-	3.8	3.7	3.8	-
RSRB Trestle, Fender, and Joint Rehabilitation	102.1	-	102.1	96.3	97.1	(5.0)
RSRB Deck Overlay	25.0	-	25.0	19.6	25.0	-
New Carquinez Bridge Project	528.2	-	528.2	512.4	519.2	(9.0)
TOTAL	918.9	-	918.9	878.4	898.9	(20.0)

Schedule Summary

Project	Actual Project Completion Date
Richmond Parkway Project	May 2001
San Mateo-Hayward Bridge Widening Project	February 2003
Bayfront Expressway Widening Project	January 2004
U.S. 101/University Interchange	April 2004
Richmond-San Rafael Bridge Trestle, Fender and Deck Joint Rehabilitation	August 2005
RSR Deck Overlay	December 2006
New Carquinez Bridge Project	December 2007

Project Status:

- All significant construction has been completed on the above listed projects. The budget and cost forecasts amounts shown above include allowances for minor project closeout costs.

Project Issues: None.



APPENDICES

- A** Toll Bridge Seismic Retrofit Program:
San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project Cost
Detail
- B** Toll Bridge Seismic Retrofit Program Cost Detail
- C** YBITS Progress Diagram
- D** OTD #1 Progress Diagram
- E** West Approach Progress Diagram
- F** Antioch/Dumbarton Bridge Baseline Schedule
- G** Regional Measure 1 Program Cost Detail
- H** Glossary of Terms

** Forecasts for the Monthly Reports are generally updated on a quarterly basis in conjunction with Risk Analysis assessments for the TBSRP Projects and the TBSRP Quarterly Reports.*

Appendix A: Toll Bridge Seismic Retrofit Program (\$ Millions)

San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project Cost Detail

Contract	EA Number	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (11/2008)	Cost To Date (11/2008)	Cost Forecast (11/2008)	At-Completion Variance
a	b	c	d	e = c + d	f	g	h = g - e
San Francisco-Oakland Bay Bridge East Span Replacement Project							
East Span - Skyway	01202X						
Capital Outlay Support		197.0	(16.0)	181.0	181.0	181.0	-
Capital Outlay Construction		1,293.0	(38.9)	1,254.1	1,236.6	1,254.1	-
Total		1,490.0	(54.9)	1,435.1	1,417.6	1,435.1	-
East Span - SAS E2/T1 Foundations	0120EX						
Capital Outlay Support		52.5	(21.5)	31.0	28.3	31.0	-
Capital Outlay Construction		313.5	(32.6)	280.9	275.0	280.9	-
Total		366.0	(54.1)	311.9	303.3	311.9	-
East Span - SAS Superstructure	0120FX						
Capital Outlay Support		214.6	-	214.6	116.1	214.6	-
Capital Outlay Construction		1,753.7	-	1,753.7	575.4	1,767.4	13.7
Total		1,968.3	-	1,968.3	691.5	1,982.0	13.7
SAS W2 Foundations	0120CX						
Capital Outlay Support		10.0	-	10.0	9.2	10.0	-
Capital Outlay Construction		26.4	-	26.4	25.8	26.4	-
Total		36.4	-	36.4	35.0	36.4	-
YBI South/South Detour	0120RX						
Capital Outlay Support		29.4	36.6	66.0	52.7	66.0	-
Capital Outlay Construction		132.0	310.2	442.2	249.9	461.2	19.0
Total		161.4	346.8	508.2	302.6	527.2	19.0
YBI Transition Structures (see notes below)	0120PX						
Capital Outlay Support		78.7	-	78.7	22.4	78.7	-
Capital Outlay Construction		299.3	(23.2)	276.1	-	276.1	-
Total		378.0	(23.2)	354.8	22.4	354.8	-
* YBI- Transition Structures Contract No. 1							
Capital Outlay Support					3.8	45.0	
Capital Outlay Construction					-	214.3	
Total					3.8	259.3	
* YBI- Transition Structures Contract No. 2							
Capital Outlay Support					2.2	16.0	
Capital Outlay Construction					-	58.5	
Total					2.2	74.5	
* YBI- Transition Structures Contract No. 3 Landscape							
Capital Outlay Support					-	1.0	
Capital Outlay Construction					-	3.3	
Total					-	4.3	
Oakland Touchdown (see notes below)	01204X						
Capital Outlay Support		74.4	-	74.4	47.2	92.1	17.7
Capital Outlay Construction		283.8	-	283.8	135.0	302.5	18.7
Total		358.2	-	358.2	182.2	394.6	36.4
* OTD Submarine Cable	0120K4						
Capital Outlay Support					0.9	3.0	
Capital Outlay Construction					7.9	9.6	
Total					8.8	12.6	
* OTD No. 1 (Westbound)	0120L4						
Capital Outlay Support					24.1	49.9	
Capital Outlay Construction					127.2	226.5	
Total					151.3	276.4	
* OTD No. 2 (Eastbound)	0120M4						
Capital Outlay Support					1.6	15.8	
Capital Outlay Construction					-	62.0	
Total					1.6	77.8	
* OTD Electrical Systems	0120N4						
Capital Outlay Support					0.5	1.4	
Capital Outlay Construction					-	4.4	
Total					0.5	5.8	

Notes: YBI Transition Structures and Oakland Touchdown Cost-to-Date and Cost Forecast includes prior-to-split Capital Outlay Support Costs.

Note: Details may not sum to totals due to rounding effects.

Appendix A: Toll Bridge Seismic Retrofit Program (\$ Millions)

San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project Cost Detail (Cont'd.)

Contract	EA Number	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (11/2008)	Cost To Date (11/2008)	Cost Forecast (11/2008)	At-Completion Variance
a	b	c	d	e = c + d	f	g	h = g - e
Existing Bridge Demolition	01209X						
Capital Outlay Support		79.7	-	79.7	0.4	79.7	-
Capital Outlay Construction		239.2	-	239.2	-	222.0	(17.2)
Total		318.9	-	318.9	0.4	301.7	(17.2)
YBI/SAS Archeology	01207X						
Capital Outlay Support		1.1	-	1.1	1.1	1.1	-
Capital Outlay Construction		1.1	-	1.1	1.1	1.1	-
Total		2.2	-	2.2	2.2	2.2	-
YBI - USCG Road Relocation	0120QX						
Capital Outlay Support		3.0	-	3.0	2.7	3.0	-
Capital Outlay Construction		3.0	-	3.0	2.8	3.0	-
Total		6.0	-	6.0	5.5	6.0	-
YBI - Substation and Viaduct	0120GX						
Capital Outlay Support		6.5	-	6.5	6.4	6.5	-
Capital Outlay Construction		11.6	-	11.6	11.3	11.6	-
Total		18.1	-	18.1	17.7	18.1	-
Oakland Geofill	01205X						
Capital Outlay Support		2.5	-	2.5	2.5	2.5	-
Capital Outlay Construction		8.2	-	8.2	8.2	8.2	-
Total		10.7	-	10.7	10.7	10.7	-
Pile Installation Demonstration Project	01208X						
Capital Outlay Support		1.8	-	1.8	1.8	1.8	-
Capital Outlay Construction		9.2	-	9.2	9.2	9.2	-
Total		11.0	-	11.0	11.0	11.0	-
Stormwater Treatment Measures	0120JX						
Capital Outlay Support		6.0	2.0	8.0	8.0	8.0	-
Capital Outlay Construction		15.0	3.3	18.3	16.6	18.3	-
Total		21.0	5.3	26.3	24.6	26.3	-
Right-of-Way and Environmental Mitigation	0120X9						
Capital Outlay Support		-	-	-	-	-	-
Capital Outlay & Right-of-Way		72.4	-	72.4	39.3	72.4	-
Total		72.4	-	72.4	39.3	72.4	-
	04343X & 04300X						
Sunk Cost - Existing East Span Retrofit							
Capital Outlay Support		39.5	-	39.5	39.5	39.5	-
Capital Outlay Construction		30.8	-	30.8	30.8	30.8	-
Total		70.3	-	70.3	70.3	70.3	-
Other Capital Outlay Support							
Environmental Phase		97.7	-	97.7	97.7	97.7	-
Pre-Split Project Expenditures		44.9	-	44.9	44.9	44.9	-
Non-project Specific Costs		20.0	(1.0)	19.0	3.2	19.0	-
Total		162.6	(1.0)	161.6	145.8	161.6	-
Subtotal Capital Outlay Support		959.3	-	959.3	665.1	977.1	17.7
Subtotal Capital Outlay Construction		4,492.2	218.8	4,711.0	2,617.0	4,745.2	34.2
Other Budgeted Capital		35.1	(3.3)	31.8	0.7	7.7	(24.1)
Total SFOBB East Span Replacement Project		5,486.6	215.5	5,702.1	3,282.8	5,730.0	27.9

Note: Details may not sum to totals due to rounding effects.

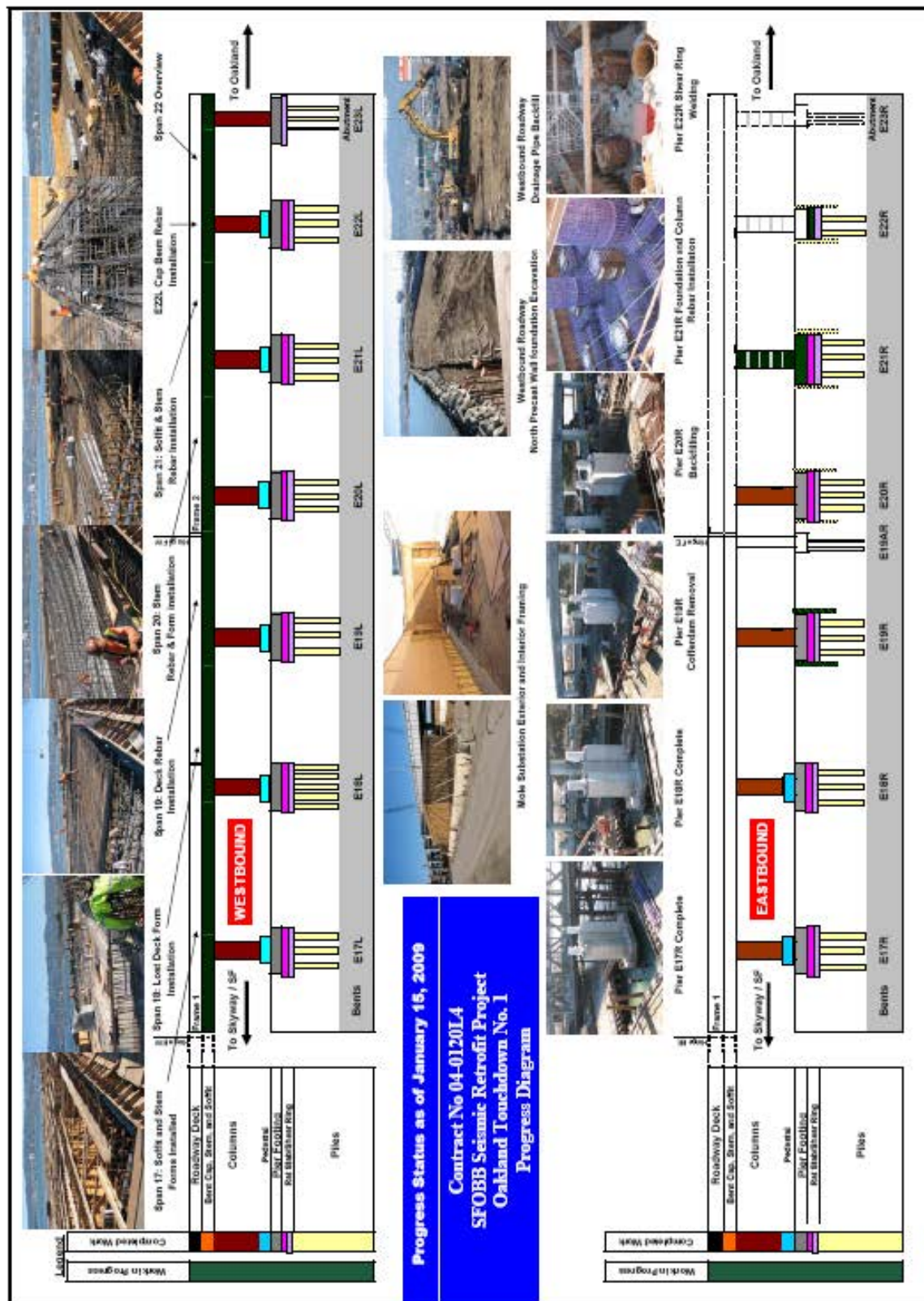
Appendix B: Toll Bridge Seismic Retrofit Program Cost Detail (\$ Millions)

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (11/2008)	Cost To Date (11/2008)	Cost Forecast (11/2008)	At-Completion Variance
a	c	d	e = c + d	f	g	h = g - e
SFOBB East Span Replacement Project						
Capital Outlay Support	959.3	-	959.3	665.1	977.1	17.8
Capital Outlay Construction	4,492.2	218.8	4,711.0	2,617.0	4,745.2	34.2
Other Budgeted Capital	35.1	(3.3)	31.8	0.7	7.7	(24.1)
Total	5,486.6	215.5	5,702.1	3,282.8	5,730.0	27.9
SFOBB West Approach Replacement						
Capital Outlay Support	120.0	-	120.0	111.9	120.0	-
Capital Outlay Construction	309.0	41.7	350.7	302.5	350.7	-
Total	429.0	41.7	470.7	414.4	470.7	-
SFOBB West Span Retrofit						
Capital Outlay Support	75.0	-	75.0	74.8	75.0	-
Capital Outlay Construction	232.9	-	232.9	227.2	232.9	-
Total	307.9	-	307.9	302.0	307.9	-
Richmond-San Rafael Bridge Retrofit						
Capital Outlay Support	134.0	(7.0)	127.0	126.7	127.0	-
Capital Outlay Construction	780.0	(90.5)	689.5	668.1	689.5	-
Total	914.0	(97.5)	816.5	794.8	816.5	-
Benicia-Martinez Bridge Retrofit						
Capital Outlay Support	38.1	-	38.1	38.1	38.1	-
Capital Outlay Construction	139.7	-	139.7	139.7	139.7	-
Total	177.8	-	177.8	177.8	177.8	-
Carquinez Bridge Retrofit						
Capital Outlay Support	28.7	-	28.7	28.8	28.7	-
Capital Outlay Construction	85.5	-	85.5	85.4	85.5	-
Total	114.2	-	114.2	114.2	114.2	-
San Mateo-Hayward Bridge Retrofit						
Capital Outlay Support	28.1	-	28.1	28.1	28.1	-
Capital Outlay Construction	135.4	-	135.4	135.3	135.4	-
Total	163.5	-	163.5	163.4	163.5	-
Vincent Thomas Bridge Retrofit (Los Angeles)						
Capital Outlay Support	16.4	-	16.4	16.4	16.4	-
Capital Outlay Construction	42.1	-	42.1	42.0	42.1	-
Total	58.5	-	58.5	58.4	58.5	-
San Diego-Coronado Bridge Retrofit						
Capital Outlay Support	33.5	-	33.5	33.2	33.5	-
Capital Outlay Construction	70.0	-	70.0	69.4	70.0	-
Total	103.5	-	103.5	102.6	103.5	-
Subtotal Capital Outlay Support	1,433.1	(7.0)	1,426.1	1,123.1	1,443.9	17.8
Subtotal Capital Outlay	6,286.8	170.0	6,456.8	4,286.6	6,491.0	34.2
Subtotal Other Budgeted Capital	35.1	(3.3)	31.8	0.7	7.7	(24.1)
Miscellaneous Program Costs	30.0	-	30.0	24.7	30.0	-
Subtotal Toll Bridge Seismic Retrofit Program	7,785.0	159.7	7,944.7	5,435.1	7,972.6	27.9
Program Contingency	900.0	(159.7)	740.3	-	712.4	(27.9)
Total Toll Bridge Seismic Retrofit Program	8,685.0	-	8,685.0	5,435.1	8,685.0	-

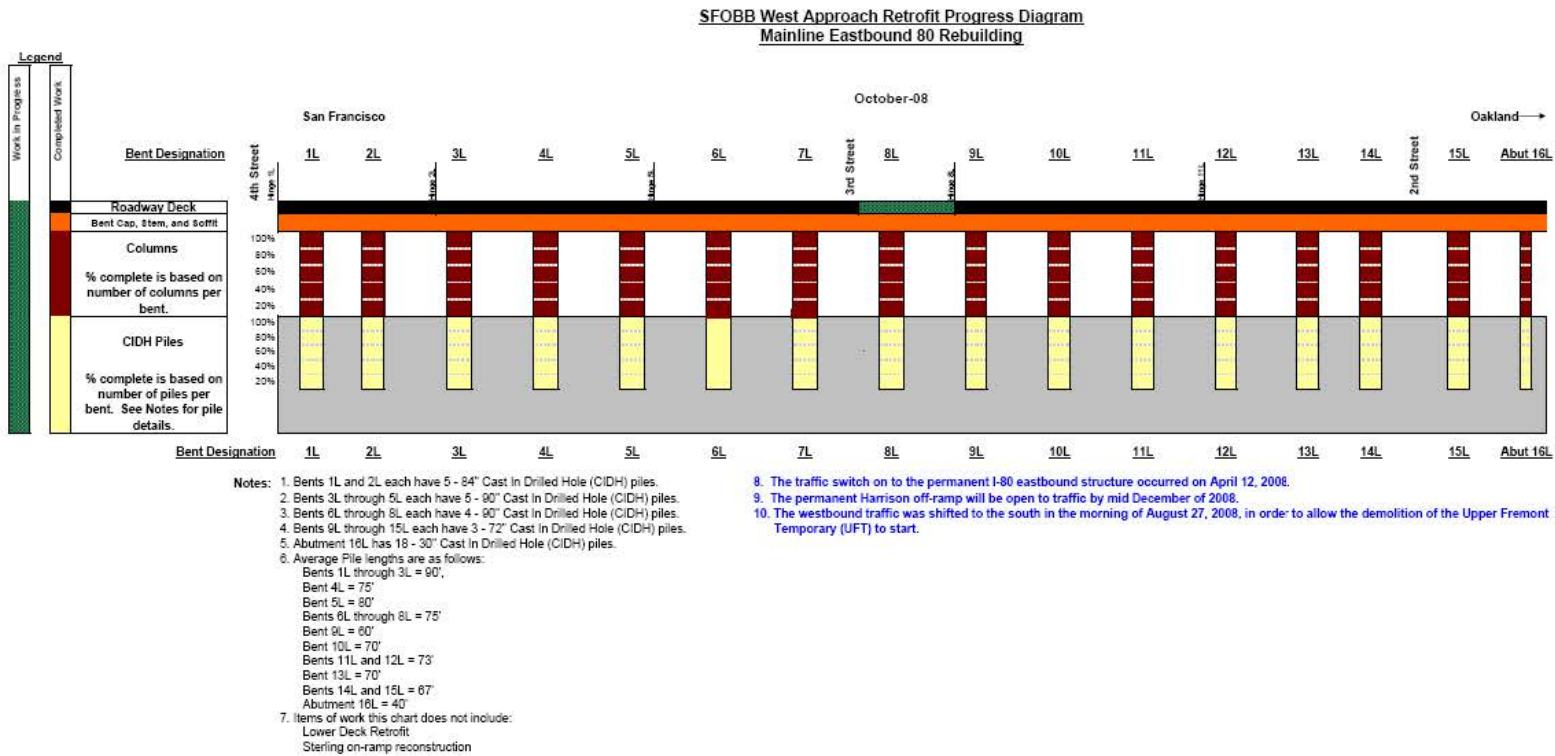
Note: Details may not sum to totals due to rounding effects.

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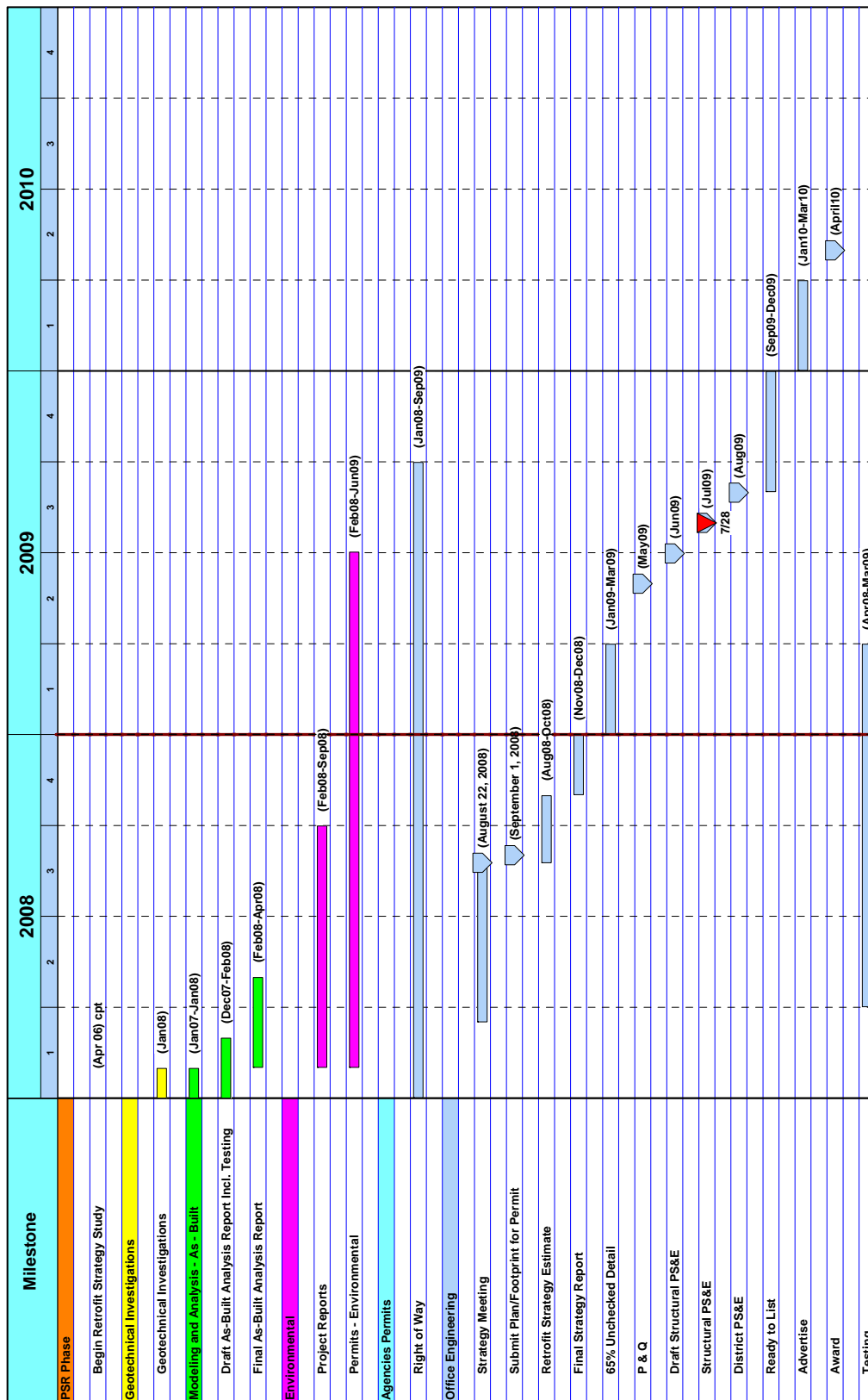
Appendix D: OTD #1 Progress Diagram



Appendix E: West Approach Progress Diagram



Appendix F: Antioch/Dumbarton Bridge Baseline Schedule



As of December 2008

Appendix G: Regional Measure 1 Program Cost Detail (\$ Millions)

Project	EA Number	BATA Budget (07/2005)	Approved Changes	Current Approved Budget (11/2008)	Cost To Date (11/2008)	Cost Forecast (11/2008)	At-Completion Variance
a	b	c	d	e = c + d	f	g	h = g - e
New Benicia-Martinez Bridge Project							
New Bridge	00603_						
Capital Outlay Support		84.9	6.7	91.6	91.6	91.6	-
Capital Outlay Construction				-			-
BATA Funding		661.9	94.6	756.5	753.7	756.5	-
Non-BATA Funding		10.1	-	10.1	10.1	10.1	-
Subtotal		672.0	94.6	766.6	763.8	766.6	-
Total		756.9	101.3	858.2	855.4	858.2	-
I-680/I-780 Interchange Reconstruction							
I-680/I-780 Interchange Reconstruction	00606_						
Capital Outlay Support							
BATA Funding		24.9	5.2	30.1	30.0	30.1	-
Non-BATA Funding		1.4	5.2	6.6	6.3	6.6	-
Subtotal		26.3	10.4	36.7	36.3	36.7	-
Capital Outlay Construction							
BATA Funding		54.7	26.9	81.6	77.1	81.6	-
Non-BATA Funding		21.6	-	21.6	21.7	21.6	-
Subtotal		76.3	26.9	103.2	98.8	103.2	-
Total		102.6	37.3	139.9	135.1	139.9	-
I-680/Marina Vista Interchange Reconstruction							
I-680/Marina Vista Interchange Reconstruction	00605_						
Capital Outlay Support		18.3	1.8	20.1	19.9	20.1	-
Capital Outlay Construction		51.5	4.9	56.4	56.1	56.4	-
Total		69.8	6.7	76.5	76.0	76.5	-
New Toll Plaza and Administration Building							
New Toll Plaza and Administration Building	00604_						
Capital Outlay Support		11.9	3.8	15.7	15.7	15.7	-
Capital Outlay Construction		24.3	2.0	26.3	23.5	26.3	-
Total		36.2	5.8	42.0	39.2	42.0	-
Existing Bridge & Interchange Modifications							
Existing Bridge & Interchange Modifications	0060A_						
Capital Outlay Support		4.3	14.3	18.6	13.7	18.6	-
Capital Outlay Construction							
BATA Funding		17.2	32.8	50.0	17.9	50.0	-
Non-BATA Funding		-	9.5	9.5	-	9.5	-
Subtotal		17.2	42.3	59.5	17.9	59.5	-
Total		21.5	56.6	78.1	31.6	78.1	-
Other Contracts							
Other Contracts	See note below						
Capital Outlay Support		11.4	(1.8)	9.6	7.4	9.6	-
Capital Outlay Construction		20.3	2.8	23.1	15.8	23.1	-
Capital Outlay Right-of-Way		20.4	(0.1)	20.3	16.9	20.3	-
Total		52.1	0.9	53.0	40.1	53.0	-
Subtotal BATA Capital Outlay Support		155.7	30.0	185.7	178.3	185.7	-
Subtotal BATA Capital Outlay Construction		829.9	164.0	993.9	944.1	993.9	-
Subtotal Capital Outlay Right-of-Way		20.4	(0.1)	20.3	16.9	20.3	-
Subtotal Non-BATA Capital Outlay Support		1.4	5.2	6.6	6.3	6.6	-
Subtotal Non-BATA Capital Outlay Construction		31.7	9.5	41.2	31.8	41.2	-
Project Reserves		20.8	4.0	24.8	-	24.8	-
Total New Benicia-Martinez Bridge Project		1,059.9	212.6	1,272.5	1,177.4	1,272.5	-

Notes: Includes EA's 00601_, 00603_, 00605_, 00606_, 00608_, 00609_, 0060A_, 0060C_, 0060E_, 0060F_, 0060G_, and 0060H_ and all Project Right-of-Way

Note: Details may not sum to totals due to rounding effects.

Appendix G: Regional Measure 1 Program Cost Detail (\$ Millions) (Cont'd.)

Project	EA Number	BATA Budget (07/2005)	Approved Changes	Current Approved Budget (11/2008)	Cost To Date (11/2008)	Cost Forecast (11/2008)	At-Completion Variance
a	b	c	d	e = c + d	f	g	h = g - e
Carquinez Bridge Replacement Project							
New Bridge	01301_						
Capital Outlay Support		60.5	(0.3)	60.2	60.2	60.2	-
Capital Outlay Construction		253.3	4.0	257.3	255.9	257.3	-
Total		313.8	3.7	317.5	316.1	317.5	-
Crockett Interchange Reconstruction	01305_						
Capital Outlay Support		32.0	(0.1)	31.9	31.9	31.9	-
Capital Outlay Construction		73.9	-	73.9	71.9	73.9	-
Total		105.9	(0.1)	105.8	103.8	105.8	-
Existing 1927 Bridge Demolition	01309_						
Capital Outlay Support		16.1	-	16.1	15.5	15.5	(0.6)
Capital Outlay Construction		35.2	-	35.2	34.8	35.2	-
Total		51.3	-	51.3	50.3	50.7	(0.6)
Other Contracts	See note below						
Capital Outlay Support		15.8	0.2	16.0	16.2	16.3	0.3
Capital Outlay Construction		18.8	(0.8)	18.0	16.1	18.1	0.1
Capital Outlay Right-of-Way		10.5	-	10.5	9.9	10.5	-
Total		45.1	(0.6)	44.5	42.2	44.9	0.4
Subtotal BATA Capital Outlay Support		124.4	(0.2)	124.2	123.8	123.9	(0.3)
Subtotal BATA Capital Outlay Construction		381.2	3.2	384.4	378.7	384.5	0.1
Subtotal Capital Outlay Right-of-Way		10.5	-	10.5	9.9	10.5	-
Project Reserves		12.1	(3.0)	9.1	-	0.3	(8.8)
Total Carquinez Bridge Replacement Project		528.2	-	528.2	512.4	519.2	(9.0)
Notes:	Other Contracts includes EA's 01301_, 01302_, 01303_, 01304_, 01305_, 01306_, 01307_, 01308_, 01309_, 0130A_, 0130C_, 0130D_, 0130F_, 0130G_, 0130H_, 0130J_, 00453_, 00493_, 04700_, 00607_, 2A270_, and 29920_ and all Project Right-of-Way						

Note: Details may not sum to totals due to rounding effects.

Appendix G: Regional Measure 1 Program Cost Detail (\$ Millions) (Cont'd.)

Project	EA Number	BATA Budget (07/2005)	Approved Changes	Current Approved Budget (11/2008)	Cost To Date (11/2008)	Cost Forecast (11/2008)	At-Completion Variance
a	b	c	d	e = c + d	f	g	h = g - e
Richmond-San Rafael Bridge Trestle, Fender, and Deck Joint Rehabilitation							
	See note ¹ below						
Capital Outlay Support							
BATA Funding		2.2	-	2.2	1.4	2.2	-
Non-BATA Funding		8.6	-	8.6	10.4	10.4	1.8
Subtotal		10.8	-	10.8	11.8	12.6	1.8
Capital Outlay Construction							
BATA Funding		40.2	-	40.2	33.4	33.4	(6.8)
Non-BATA Funding		51.1	-	51.1	51.1	51.1	-
Subtotal		91.3	-	91.3	84.5	84.5	(6.8)
Project Reserves		-	-	-	-	-	-
Total		102.1	-	102.1	96.3	97.1	(5.0)
Richmond-San Rafael Bridge Deck Overlay Rehabilitation							
	04152_						
Capital Outlay Support							
BATA Funding		4.0	(0.4)	3.6	3.3	3.6	-
Non-BATA Funding		4.0	(4.0)	-	-	-	-
Subtotal		8.0	(4.4)	3.6	3.3	3.6	-
Capital Outlay Construction		16.9	3.6	20.5	16.3	16.2	(4.3)
Project Reserves		0.1	0.8	0.9	-	5.2	4.3
Total		25.0	-	25.0	19.6	25.0	-
Richmond Parkway Project (RM 1 Share Only)							
	Non-Caltrans						
Capital Outlay Support		-	-	-	-	-	-
Capital Outlay Construction		5.9	-	5.9	4.3	5.9	-
Total		5.9	-	5.9	4.3	5.9	-
San Mateo-Hayward Bridge Widening							
	See note ² below						
Capital Outlay Support		34.6	(0.3)	34.3	34.1	34.3	-
Capital Outlay Construction		180.2	-	180.2	174.1	176.2	(4.0)
Capital Outlay Right-of-Way		1.5	-	1.5	0.5	0.6	(0.9)
Project Reserves		1.5	0.3	1.8	-	0.8	(1.0)
Total		217.8	-	217.8	208.7	211.9	(5.9)
I-880/SR-92 Interchange Reconstruction							
	EA's 23317_, 01601_, and 01602_						
Capital Outlay Support		28.8	26.2	55.0	43.9	55.0	-
Capital Outlay Construction							
BATA Funding		85.2	60.2	145.4	49.6	145.4	-
Non-BATA Funding		9.6	-	9.6	-	9.6	-
Subtotal		94.8	60.2	155.0	49.6	155.0	-
Capital Outlay Right-of-Way		9.9	7.0	16.9	11.6	16.9	-
Project Reserves		0.3	17.8	18.1	-	18.1	-
Total		133.8	111.2	245.0	105.1	245.0	-
Bayfront Expressway Widening							
	EA's 00487_, 01511_, and 01512_						
Capital Outlay Support		8.6	(0.3)	8.3	8.3	8.2	(0.1)
Capital Outlay Construction		26.5	-	26.5	24.9	26.5	-
Capital Outlay Right-of-Way		0.2	-	0.2	0.2	0.2	-
Project Reserves		0.8	0.3	1.1	-	1.1	-
Total		36.1	-	36.1	33.4	36.0	(0.1)
US 101/University Avenue Interchange Modification							
	Non-Caltrans						
Capital Outlay Support		-	-	-	-	-	-
Capital Outlay Construction		3.8	-	3.8	3.7	3.8	-
Total		3.8	-	3.8	3.7	3.8	-
Subtotal BATA Capital Outlay Support		358.3	55.0	413.3	393.1	412.9	(0.4)
Subtotal BATA Capital Outlay Construction		1,569.8	231.0	1,800.8	1,629.1	1,785.8	(15.0)
Subtotal Capital Outlay Right-of-Way		42.5	6.9	49.4	39.1	48.5	(0.9)
Subtotal Non-BATA Capital Outlay Support		14.0	1.2	15.2	16.7	17.0	1.8
Subtotal Non-BATA Capital Outlay Construction		92.4	9.5	101.9	82.9	101.9	-
Project Reserves		35.6	20.2	55.8	-	50.3	(5.5)
Total RM1 Program		2,112.6	323.8	2,436.4	2,160.9	2,416.4	(20.0)

Notes:

¹ Richmond-San Rafael Bridge Trestle, Fender, and Deck Joint Rehabilitation Includes Non-TBSRA Expenses for EA 0438U_ and 04157_

² San Mateo-Hayward Bridge Widening Includes EA's 00305_, 04501_, 04502_, 04503_, 04504_, 04505_, 04506_, 04507_, 04508_, 04509_, 27740_, 27790_, 04860_

Note: Details may not sum to totals due to rounding effects.

Appendix H: Glossary of Terms

AB144/SB 66 BUDGET: The planned allocation of resources for the Toll Bridge Seismic Retrofit Program, or subordinate projects or contracts, as provided in Assembly Bill 144 and Senate Bill 66, signed into law by Governor Schwarzenegger on July 18, 2005 and September 29, 2005, respectively.

BATA BUDGET: The planned allocation of resources for the Regional Measure 1 Program, or subordinate projects or contracts as authorized by the Bay Area Toll Authority as of June 2005.

APPROVED CHANGES: For cost, changes to the AB144/SB 66 Budget or BATA Budget as approved by the Bay Area Toll Authority Commission. For schedule, changes to the AB 144/SB 66 Project Complete Baseline approved by the Toll Bridge Program Oversight Committee, or changes to the BATA Project Complete Baseline approved by the Bay Area Toll Authority Commission.

CURRENT APPROVED BUDGET: The sum of the AB144/SB66 Budget or BATA Budget and Approved Changes.

COST TO DATE: The actual expenditures incurred by the program, project or contract as of the month and year shown.

COST FORECAST: The current forecast of all of the costs that are projected to be expended so as to complete the given scope of the program, project, or contract.

AT COMPLETION VARIANCE or VARIANCE (cost): The mathematical difference between the Cost Forecast and the Current Approved Budget.

AB 144/SB 66 PROJECT COMPLETE BASELINE: The planned completion date for the Toll Bridge Seismic Retrofit Program or subordinate projects or contracts.

BATA PROJECT COMPLETE BASELINE: The planned completion date for the Regional Measure 1 Program or subordinate projects or contracts.

PROJECT COMPLETE CURRENT APPROVED SCHEDULE: The sum of the AB144/SB66 Project Complete Baseline or BATA Project Complete Baseline and Approved Changes.

PROJECT COMPLETE SCHEDULE FORECAST: The current projected date for the completion of the program, project, or contract.

SCHEDULE VARIANCE or VARIANCE (schedule): The mathematical difference expressed in months between the Project Complete Schedule Forecast and the Project Complete Current Approved Schedule.

The following information is provided in accordance with California Government code Section 755. This document is one of a series of reports prepared for the Bay Area Toll Authority (BATA)/Metropolitan Transportation Commission (MTC) for the Toll Bridge Seismic Retrofit and Regional Measure 1 Programs. The contract value for the monitoring efforts, technical analysis, and field site works that contribute to these reports, as well as the report preparation and production, is \$1,574,873.73.

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ITEM 3: PROGRESS REPORTS

- b. Draft Fourth Quarter 2008 Report,
December 31, 2008

TO: Toll Bridge Program Oversight Committee **DATE:** January 26, 2009
(TBPOC)

FR: Andrew Fremier, Deputy Executive Director, BATA

RE: Agenda No. - 3b
Progress Reports
Item- Draft Fourth Quarter Report, December 31, 2008

Recommendation:

For Information / **APPROVAL**

Cost:

N/A

Schedule Impacts:

N/A

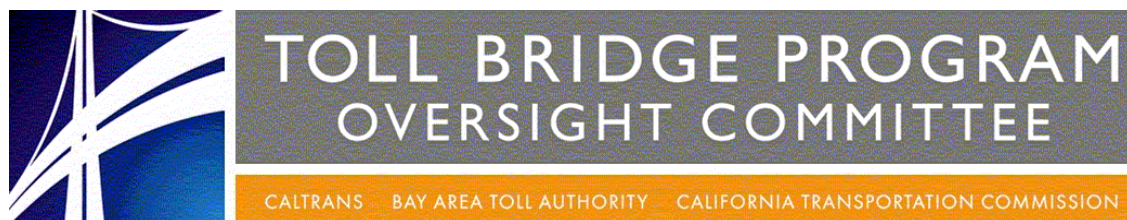
Discussion:

Attached, for information, is the Projected 4th Quarter 2008 Report Production Schedule, which reflects the status of completed report tasks and the schedule for remaining actions.

Also included in this package is the Draft Fourth Quarter Report, December 31, 2008. The TBPOC is requested to grant the PMT authority to approve this report on its behalf after appropriate reviews and final comments on the proposed final draft are received.

Attachment(s):

1. Projected 4th Quarter 2008 Report Production Schedule
2. Draft Fourth Quarter Report, December 31, 2008 (see end of binder)



4th Quarter 2008 Report Production Schedule

4th Quarter 2008 Report: Legislated Deadline - February 12, 2008	
BAMC Begin Quarterly Report Development; Issue First Call for Input	Monday, December 15, 2008
BAMC Prepare Quarterly Report 1st Draft for PMT, BATA, Caltrans	Monday, January 05, 2009
PMT / BATA / Caltrans Review & Comment on 1st Draft	Thursday, January 08, 2009
BAMC Incorporate Comments: Produce 2nd Draft for TBPOC Review	Friday, January 09, 2009
TBPOC Review & Comment on 2nd Draft	Monday, January 12, 2009
Expenditure Update (Anticipated Date)	Monday, January 19, 2009
BAMC Incorporate Comments; Produce Proposed Final Draft for TBPOC and Agency	Tuesday, January 20, 2009
BAMC Issue Proposed Final Draft to TBPOC & Agency	Thursday, January 22, 2009
TBPOC and Agency Review / Comment on Proposed Final Draft	Friday, January 30, 2009
BAMC Incorporate Comments: Produce Advanced Final Draft + Table of Conflicting Comments	Wednesday, February 04, 2009
TBPOC Teleconference to make Final Comments and Resolve Conflicting Comments	Friday, February 06, 2009
BAMC Incorporate All Final Comments from TBPOC; Emails Final Version for Information	Wednesday, February 11, 2009
Produce & Issue Quarterly Report to Legislature & CTC (holiday)	Thursday, February 12, 2009

Toll Bridge Seismic Retrofit Program Report



TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION



Fourth Quarter Report
December 31, 2008



TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION

Toll Bridge Program Oversight Committee
Department of Transportation
Office of the Director
1120 N Street
P.O. Box 942873
Sacramento, CA 94273-0001

February 6, 2009

Mr. John Chalker, Chair
California Transportation Commission
1120 N Street, Room 2221
Sacramento, CA 95814

Mr. Bob Alvarado, Vice-Chair
California Transportation Commission
1120 N Street, Room 2221
Sacramento, CA 95814

Dear Commissioners Chalker and Alvarado:

The Toll Bridge Program Oversight Committee (TBPOC) is pleased to submit the 2008 fourth quarter Toll Bridge Seismic Retrofit Program Report, prepared pursuant to California Streets and Highways Code Section 30952.2. This fourth quarter report includes project progress and activities for the Toll Bridge Seismic Retrofit Program (TBSRP) through December 31, 2008.

California Streets and Highways Code Section 30952.1 established the TBPOC to exercise project oversight and control over the TBSRP. The TBPOC comprises the Director of the Department of Transportation (Caltrans), the Executive Director of the Bay Area Toll Authority (BATA), and the Executive Director of the California Transportation Commission (CTC). The TBPOC's program oversight and control activities include review and approval of contract bid documents, review and resolution of project issues, evaluation and approval of project change orders and claims and the issuance of monthly and quarterly program progress reports.

In this fourth quarter, Caltrans certified seismic safety on the San Francisco-Oakland Bay Bridge West Approach Replacement Project on December 22, 2008 – seven months ahead of schedule. Likened to triple bypass open-heart surgery while the patient is running a marathon, Caltrans and their contractor successfully replaced a critical transportation route that weaved through the heart

John Chalker
Bob Alvarado
February 6, 2009
Page 2

of San Francisco, while keeping all lanes of traffic open for daily commuters. Over the next month, Caltrans will be closing out the project and reopening the Harrison Street off ramp.

On the San Francisco-Oakland Bay Bridge East Span Seismic Replacement Project, there have been recent news reports concerning the fabrication challenges on the Self-Anchored Suspension Span (SAS). These reports include questions about the quality of the welds on the steel being fabricated for the new span. As we have reported in past quarterly reports, we have been working diligently to resolve these fabrication challenges and to keep the project on schedule.

Caltrans has instituted inspection protocols approved by engineering professionals from around the world and has placed a number of qualified construction and inspection staff at the fabrication facilities to ensure quality. Furthermore, the TBPOC is negotiating directly with the SAS contractor to mitigate any schedule delays. No part of the new bridge will be shipped unless it is fit to be installed and all efforts will be made to keep the project on schedule and on budget. No additional funds are needed to resolve these issues and the bridge is scheduled to open as planned in 2012 westbound and 2013 eastbound.

The next year will be one of the most critical for the new east span with a number of milestone activities. In February, we anticipate the delivery of a new shearleg crane barge (perhaps the largest operating in the United States) that will be used to lift sections of the new bridge into place. Towards the middle of the year, the first shipments of steel roadway sections are scheduled to arrive. These sections will be followed by the tower segments later in the year. Finally, a weekend closure of the Bay Bridge is expected in the latter half of the year for the roll out of a section of the existing bridge and the roll in of a new section to allow for the detour of traffic off the existing bridge and construction of new transition structures from the Yerba Buena Island tunnel to the SAS.

The TBPOC is committed to providing the Legislature with comprehensive and timely reporting on the TBSRP. If there are any questions, or if any additional information is required, please do not hesitate to contact the members of the TBPOC.

Sincerely,

WILL KEMPTON
Director
California Department of Transportation
Chair, Toll Bridge Oversight Committee

JOHN F. BARNA, JR.
Executive Director
California Transportation Commission

STEVE HEMINGER
Executive Director
Bay Area Toll Authority



TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION

Toll Bridge Program Oversight Committee
Department of Transportation
Office of the Director
1120 N Street
P.O. Box 942873
Sacramento, CA 94273-0001

February 6, 2009

Mr. Gregory Schmidt
Secretary of the Senate
State Capitol, Room 3044
Sacramento, CA 95814

Mr. E. Dotson Wilson
Chief Clerk of the Assembly
State Capitol, Room 3196
Sacramento, CA 95814

Dear Messrs. Schmidt and Wilson:

The Toll Bridge Program Oversight Committee (TBPOC) is pleased to submit the 2008 fourth quarter Toll Bridge Seismic Retrofit Program Report, prepared pursuant to California Streets and Highways Code Section 30952.2. This fourth quarter report includes project progress and activities for the Toll Bridge Seismic Retrofit Program (TBSRP) through December 31, 2008.

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Gregory Schmidt
E. Dotson Wilson
February 6, 2009
Page 2

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Caltrans has instituted inspection protocols approved by engineering professionals from around the world and has placed a number of qualified construction and inspection staff at the fabrication facilities to ensure quality. Furthermore, the TBPOC is negotiating directly with the SAS contractor to mitigate any schedule delays. No part of the new bridge will be shipped unless it is fit to be installed and all efforts will be made to keep the project on schedule and on budget. No additional funds are needed to resolve these issues and the bridge is scheduled to open as planned in 2012 westbound and 2013 eastbound.

The next year will be one of the most critical for the new east span with a number of milestone activities. In February, we anticipate the delivery of a new shearleg crane barge (perhaps the largest operating in the United States) that will be used to lift sections of the new bridge into place. Towards the middle of the year, the first shipments of steel roadway sections are scheduled to arrive. These sections will be followed by the tower segments later in the year. Finally, a weekend closure of the Bay Bridge is expected in the latter half of the year for the roll out of a section of the existing bridge and the roll in of a new section to allow for the detour of traffic off the existing bridge and construction of new transition structures from the Yerba Buena Island tunnel to the SAS.

The TBPOC is committed to providing the Legislature with comprehensive and timely reporting on the TBSRP. If there are any questions, or if any additional information is required, please do not hesitate to contact the members of the TBPOC.

Sincerely,

WILL KEMPTON
Director
California Department of Transportation
Chair, TBPOC

JOHN F. BARNA, JR.
Executive Director
California Transportation Commission

STEVE HEMINGER
Executive Director
Bay Area Toll Authority

Table of Contents

EXECUTIVE SUMMARY	1
TABLE 2-TOLL BRIDGE SEISMIC RETROFIT PROGRAM—COST SUMMARY	4
TABLE 3-TOLL BRIDGE SEISMIC RETROFIT PROGRAM—SCHEDULE SUMMARY	6
PROGRAM COSTS.....	7
BASELINE AND PROJECTED BUDGET	7
PROGRAM SCHEDULE.....	7
BASELINE AND PROJECTED SCHEDULE.....	8
PROGRAM FUNDING AND FINANCING.....	9
<i>Funding Status</i>	10
<i>Program Financing</i>	11
PROJECT STATUS.....	12
ONGOING CONSTRUCTION PROJECTS	12
<i>SFOBB West Approach</i>	12
<i>Milestones Achieved</i>	12
<i>SFOBB East Span Seismic Replacement</i>	13
<i>Milestones Achieved – East Span Contracts</i>	15
<i>Major Risk Issues</i>	21
<i>SFOBB East Span Project Replacement Risk Management Plan</i>	21
COMPLETED PROJECTS	23
RISK MANAGEMENT PROGRAM	24
RISK IDENTIFICATION AND RISK RESPONSE	24
ADEQUACY OF PROGRAM RESERVES	25
OTHER TOLL BRIDGES	27
<i>The Dumbarton Bridge</i>	27
<i>The Antioch Bridge</i>	27
SUMMARY OF TBPOC EXPENSES.....	29
APPENDICES	31
APPENDIX A-1.....	32
APPENDIX A-2.....	32
APPENDIX B.	34
APPENDIX C.	36
APPENDIX D.....	37
APPENDIX E.	38
APPENDIX F.....	39
APPENDIX G. PROJECT/CONTRACT PHOTOGRAPHS/DIAGRAMS.....	40

Executive Summary

The Toll Bridge Program Oversight Committee (TBPOC) submits the 2008 Fourth Quarter Report ending December 31, 2008 for the Toll Bridge Seismic Retrofit Program (TBSRP) in accordance with Assembly Bill (AB) 144 and Senate Bill (SB) 66. This report provides the following:

1. Information on the progress of each project in the program
2. Baseline budget for Capital Outlay (CO) and Capital Outlay Support (COS)
3. Current projected costs for CO and COS
4. Expenditures to date
5. Comparison of the baseline schedule to the December 2008 projected schedule
6. Summary of the milestones achieved during the quarter
7. Major risk assessment for the remaining projects
8. Summary of expenses incurred by the TBPOC in performing its duties

Major Highlights during the Fourth Quarter 2008

Of the seven toll bridges in the TBSRP, only the San Francisco-Oakland Bay Bridge (SFOBB) remains to be retrofitted. Highlights of major milestones and actions made during the quarter include:

- San Francisco-Oakland Bay Bridge West Approach Replacement Project, the California Department of Transportation (Caltrans) certified seismic safety on the project on December 22, 2008 – eight months ahead of schedule. To accelerate the project and minimize impacts to the local community and the traveling public, the TBPOC has approved a number of contract changes, including most recently an additional allocation of \$17 million to the project budget in November 2008. The costs of these changes are within the TBSRP program contingency and will result in no change to the overall program budget. Final close-out and punchlist work is ongoing on the



SAS – First Completed Deck Segment



Temporary Support Truss Being Fabricated at ZPMC

contract and will be completed in the first quarter of 2009. (See project notes on page 12.)

- As part of the SFOBB East Span Seismic Replacement Project, the Self-Anchored Suspension Span (SAS) contract is constructing the superstructure of the signature span between the Skyway and Yerba Buena Island (YBI). Work is occurring both in the Bay Area and around the world to complete the span.

American Bridge/Fluor, the prime contractor on the project, is performing civil work both on YBI and out on the bay with construction of the W2 and E2 support piers and with the erection of temporary support structures that will support the SAS deck sections during construction.

A labor dispute arose in December 2008 involving the off-loading of the temporary structures from a ship while tied off to the job site dock. The dispute was resolved to allow for off-loading of the ship in the middle of the Bay. The contractor and the TBPOC are working to resolve the dispute for future shipments.

Completion of all temporary foundation structures is expected in the summer of 2009.

Fabrication of the towers, roadway decks, and saddles continues in Asia. While significant progress has been made on the decks and towers, the SAS contractor has stated that the fabrication schedule for the roadway boxes is behind schedule. This delay may increase and result in additional cross-impacts to the corridor schedule. (See “Risk Management Program” on page 25 for more information.) The contractor and TBPOC have negotiated a tentative agreement to accelerate the work. The agreement is expected to be finalized in the first quarter of 2009. The cost for this agreement is within the contingency set aside and should not impact the program contingency or budget. The TBPOC and contractor continue to evaluate options to accelerate the project.

A large barge-mounted crane needed to erect the new bridge has been completed and will arrive in the Bay Area in late February 2009.

- The Yerba Buena Island Detour contract (YBID) is constructing a temporary detour structure from the Yerba Buena Island tunnel to the existing east span. The contract is making progress on the temporary detour viaduct and on advanced work on a number of foundations



Testing of the Shear Leg Crane Barge at ZPMC

for the future transition structure from the SAS to the tunnel. Clearly visible to the traveling public, the double-deck steel truss of the temporary detour viaduct is being pieced together just south of the existing bridge.

The contract originally intended to put traffic on a temporary detour in 2006 to meet an earlier east span replacement schedule. The current revised schedule will not have traffic on the temporary detour until 2009. To better integrate the contract into the revised project schedule, the TBPOC has approved a number of changes to the contract. These changes included adding the deck replacement work near the tunnel that was rolled into place over Labor Day Weekend 2007, advancing future transition structure foundation work and making design enhancement to the temporary detour structure.

- Significant construction risks have been identified that will require additional funds to be budgeted for the YBID contract. In June

2008, the TBPOC approved a revised project budget of \$442.2 million for the project, which is \$107.8 million higher than the previously approved budget. The revised forecast for the project is \$461.2 million, which includes additional contingencies to cover the potential project risks. The budget change will be funded from the TBSRP program contingency and redirected project savings from the E2/T1, Skyway, Richmond-San Rafael Bridge contracts. The TBPOC has approved a number of scope and schedule changes to better time the opening of the detour with the current revised project schedule. Along with pacing the construction of the detour bridge for an opening in mid to late 2009, select foundation and column work for the Yerba Buena Island transition structures was advanced on the detour contract to minimize construction schedule delay risks from construction delays on bridge foundations.

(See page 5 – Table 2 and project notes starting on page 17.)



View from Yerba Buena Island with Double-Deck Steel Truss of the Temporary Detour Viaduct on Right

Program Overview

Seven of the nine state-owned toll bridges were identified for seismic retrofit in the TBSRP:

1. Benicia-Martinez Bridge
2. Carquinez Bridge
3. San Mateo-Hayward Bridge
4. Vincent Thomas Bridge
5. San Diego-Coronado Bridge
6. Richmond-San Rafael Bridge
7. SFOBB (West Span, West Approach replacement, and East Span replacement)

Seismic retrofit of these complex structures presents an extremely difficult engineering challenge. Nowhere in the world has a bridge seismic safety program of this size been undertaken.

As shown in *Table 1-TBSRP Project Status*, a significant portion of the TBSRP is complete. Only the East Span Seismic Replacement projects remain to be seismically retrofitted.

The **fourth quarter 2008** forecast indicates that the TBSRP projects will be completed within the overall current TBPOC approved program budget. *Tables 2 and 3* on the following pages provide a summary of the cost, schedule and status of all the TBSRP projects.

The Dumbarton and Antioch bridges were not originally included in the TBSRP. Further seismic vulnerability studies were completed and retrofit strategies with project **costs and schedule estimates** have been proposed for both bridges. (See discussion on pages 27 and 28).

Table 1-TBSRP Project Status

Toll Bridge Seismic Retrofit Projects	Seismic Safety Status
San Francisco-Oakland Bay Bridge East Span Replacement	Construction
San Francisco-Oakland Bay Bridge West Approach Replacement	Open
San Francisco-Oakland Bay Bridge West Span Seismic Retrofit	Complete
San Mateo-Hayward Bridge Seismic Retrofit	Complete
Richmond-San Rafael Bridge Seismic Retrofit	Complete
Carquinez Bridge Eastbound Seismic Retrofit	Complete
Benicia-Martinez Bridge Seismic Retrofit	Complete
San Diego-Coronado Bridge Seismic Retrofit	Complete
Vincent Thomas Bridge Seismic Retrofit	Complete

Table 2-Toll Bridge Seismic Retrofit Program—Cost Summary (\$ Millions)

Project	Work Status	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (011/2008)	Cost To Date (011/2008)	Cost Forecast*	At- Completion Variance	Cost Status
a	b	c	d	e = c + d	f	g	h = g - e	i
SFOBB East Span Replacement Project								
Capital Outlay Support		959.3	-	959.3	665.1	977.1	17.8	●
Capital Outlay Construction								
Skyway	Complete	1,293.0	(38.9)	1,254.1	1,236.6	1,254.1	-	●
SAS E2/T1 Foundations	Complete	313.5	(32.6)	280.9	275.0	280.9	-	●
SAS Superstructure	Construction	1,753.7	-	1,753.7	575.4	1,767.4	13.7	●
YBI Detour	Design/Const	132.0	310.2	442.2	249.9	461.2	19.0	●
YBI Transition Structures		299.3	(23.2)	276.1	-	276.1	-	●
* YBITS Contract No. 1	Design				-	214.3		
* YBITS Contract No. 2	Design				-	58.5		
* YBITS Contract No. 3 - Landscape	Design				-	3.3		
Oakland Touchdown (OTD)		283.8	-	283.8	135.0	302.5	18.7	
* OTD Submarine Cable	Complete				7.9	9.6		●
* OTD No. 1 (Westbound)	Construction				127.2	226.5		●
* OTD No. 2 (Eastbound)	Design				-	62.0		●
* OTD Electrical Systems	Design				-	4.4		●
Existing Bridge Demolition	Design	239.2	-	239.2	-	222.0	(17.2)	●
Stormwater Treatment Measures	Construction	15.0	3.3	18.3	16.6	18.3	-	●
East Span Completed Projects		90.3	-	90.3	89.2	90.3	-	
Right-of-Way and Environmental Mitigation		72.4	-	72.4	39.3	72.4	-	●
Other Budgeted Capital		35.1	(3.3)	31.8	0.7	7.7	(24.1)	
Total SFOBB East Span Replacement Project		5,486.6	215.5	5,702.1	3,282.8	5,730.0	27.9	
SFOBB West Approach Replacement								
Capital Outlay Support	Construction	120.0	-	120.0	111.9	120.0	-	●
Capital Outlay Construction		309.0	41.7	350.7	302.5	350.7	-	●
Total SFOBB West Approach Replacement		429.0	41.7	470.7	414.4	470.7	-	
Richmond-San Rafael Bridge Retrofit								
Capital Outlay Support	Complete	134.0	(7.0)	127.0	126.7	127.0	-	●
Capital Outlay Construction & Right-of-Way		780.0	(90.5)	689.5	668.1	689.5	-	
Total Richmond-San Rafael Bridge Retrofit		914.0	(97.5)	816.5	794.8	816.5	-	
Program Completed Projects								
Capital Outlay Support	Complete	219.8	-	219.8	219.4	219.8	-	
Capital Outlay Construction		705.6	-	705.6	699.0	705.6	-	
Total Program Completed Projects		925.4	-	925.4	918.4	925.4	-	
Miscellaneous Program Costs		30.0	-	30.0	24.7	30.0	-	
Program Contingency		900.0	(159.7)	740.3	-	712.4	(27.9)	
Total Toll Bridge Seismic Retrofit Program		8,685.0	-	8,685.0	5,435.1	8,685.0	-	




 Within Approved Schedule and Budget
 Potential Cost and Schedule Impacts: Likely future need for Program Contingency Allocation
 Known Cost and Schedule Impacts: Request for Program Contingency Allocation forthcoming
 Note: Details may not sum to totals due to rounding effects.

Table 3-Toll Bridge Seismic Retrofit Program—Schedule Summary

Project	AB 144 / SB 66 Project Complete Baseline (07/2005)	Approved Changes (Months)	Project Complete Current Approved Schedule (09/2008)	Project Complete Schedule Forecast (09/2008)	Schedule Variance (Months)	Schedule Status	Remarks
a	b	c	d = b + c	e	f = e - d	g	h
SFOBB East Span Replacement Project Skyway	Apr 07	8	Dec 07	Dec 07	-	●	
SAS E2/T1 Foundations	Jun 08	(3)	Mar 08	Jan 08	(2)	●	
SAS Superstructure	Mar 12	12	Mar 13	Mar 13	-	●	See Note. Go to Page 25, Risk Management Program, for more information.
YBI Detour	Jul 07	36	Jun 10	Jun 10	-	●	
YBI Transition Structures	Nov 13	12	Nov 14	Nov 14	-	●	
Oakland Touchdown (OTD)	Nov 13	12	Nov 14	Nov 14	-	●	
• OTD Submarine Cable	n/a		Jan 08	Jan 08	-	●	
• OTD Westbound	n/a		Jan 10	Jan 10	-	●	
• OTD Eastbound	n/a		Nov 14	Nov 14	-	●	See Note.
Existing Bridge Demolition	Sep 14	12	Sep 15	Sep 15	-	●	See Note.
Stormwater Treatment Measures	Mar 08	-	Mar 08	Mar 08	-	●	
Open-to-Traffic Date: Westbound	Sep 11	12	Sep 12	Sep 12	-	●	See Note.
Open-to-Traffic Date: Eastbound	Sep 12	12	Sep 13	Sep 13	-	●	See Note.
SFOBB West Approach Replacement	Aug 09	(7)	Jan 2009	Jan 2009	-	●	Seismic retrofit completed December 22, 2008
• Open-to-Traffic Date: Mainline		-		April 2008			Open To Traffic.
Richmond-San Rafael Bridge		-					
• Seismic Retrofit	Aug 05	-	Aug 05	Oct 05	2	●	Seismic retrofit completed July 29, 2005. Formal acceptance of contract October 28, 2005.
• Public Access Project	n/a	-	May 07	Sept 07	4	●	

Note: Schedules for selected projects and the Open-to-Traffic dates were extended by 12 months from the AB 144/SB 66 baseline schedule due to Addenda #5 and #7 on the SAS Superstructure contract in response to bidder inquiries and to reduce costs.

Program Costs

Baseline and Projected Budget

The 2005 AB 144/SB 66 budget is \$7.785 billion for Capital Outlay (CO) and Capital Outlay Support (COS) plus \$900 million in program contingency for a total baseline budget of \$8.685 billion. The fourth quarter 2008 forecast for the program remains steady at the \$8.685 billion budget. The third quarter 2008 forecast for the SFOBB East Span Project is \$5.730.0 billion and is based on revised construction estimates, current project management information and the risk management effort.

Additional cost estimate and expenditure details for the TBSRP are included in Appendices A-1 and A-2. The details of the cost estimates and expenditures for the SFOBB East Span are shown in Appendix B.



E2 Concrete Pour

Table 4-Toll Bridge Seismic Retrofit Program Cost (\$ Millions)

Contracts	AB 144 / SB 66 Baseline Budget	Approved Changes	Current Approved Budget	4 Quarter 2008 Forecast	Difference from Current Approved Budget
Completed Projects					
Benicia-Martinez	177.8	-	177.8	177.8	-
Carquinez	114.2	-	114.2	114.2	-
San Mateo-Hayward	163.5	-	163.5	163.5	-
Vincent Thomas	58.5	-	58.5	58.5	-
San Diego-Coronado	103.5	-	103.5	103.5	-
SFOBB West Span	307.9	-	307.9	307.9	-
Ongoing Projects					
Richmond-San Rafael	914.0	(97.5)	816.5	816.5	-
SFOBB West Approach	429.0	41.7	470.7	470.7	-
SFOBB East Span	5,486.6	215.5	5,702.1	5,730.0	27.9
Miscellaneous Program Costs	30.0	-	30.0	30.0	-
Subtotal	7,785.0	159.7	7,944.7	7,972.6	27.9
Program Contingency	900.0	(159.7)	740.3	712.4	(27.9)
Total Program	8,685.0	-	8,685.0	8,685.0	-

Program Schedule

Baseline and Projected Schedule

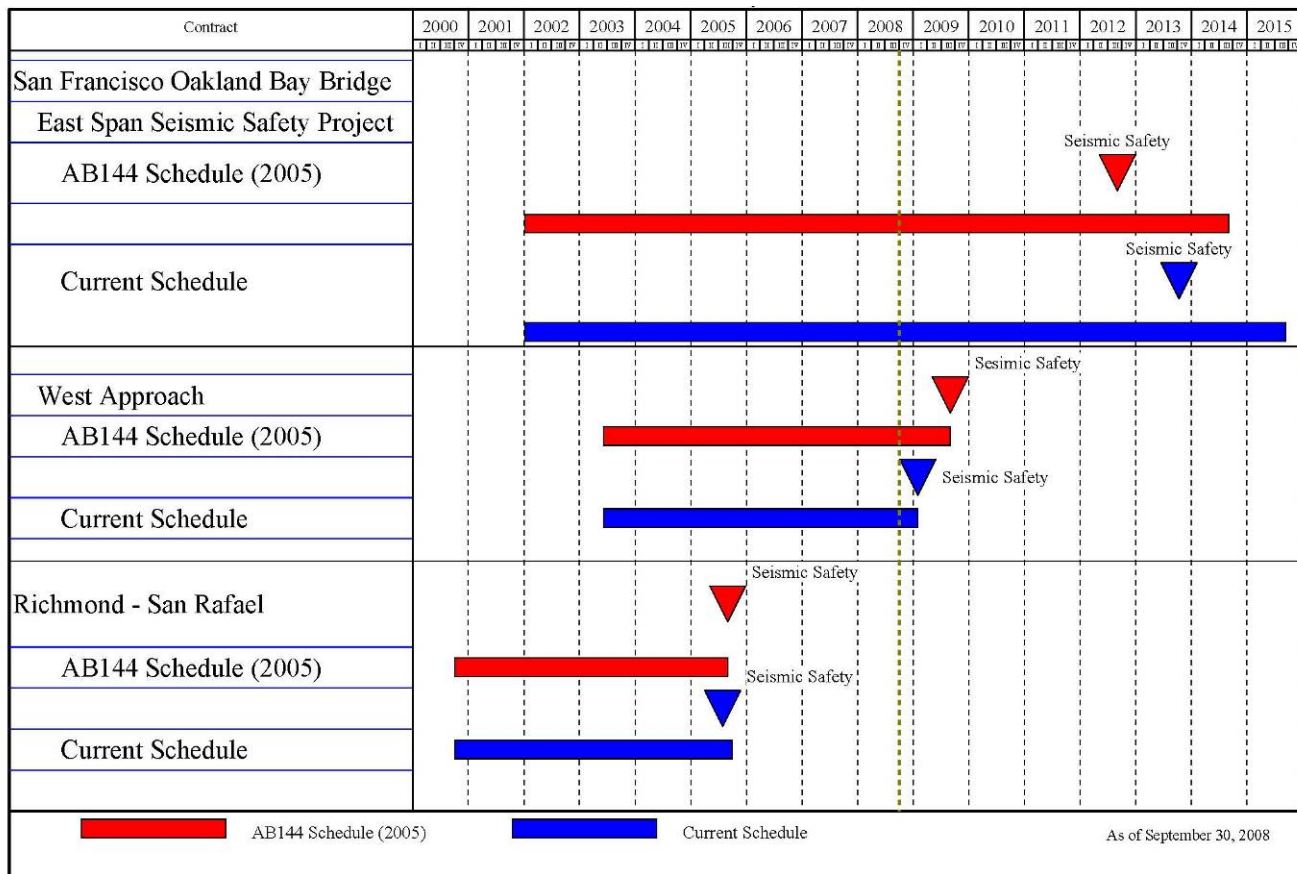
Seismic retrofit of six of the seven toll bridges in the TBSRP is complete. These structures include the Benicia-Martinez, Carquinez, Richmond-San Rafael, San Mateo-Hayward, Vincent Thomas and San Diego-Coronado bridges.

While the west spans and west approach of the San Francisco-Oakland Bay Bridge have been retrofitted, the east span construction continues. The new East Span is forecast to open in the

westbound direction in September 2012 and in the eastbound direction in September 2013.

It is estimated that all construction activities for the SFOBB East Span Seismic Replacement project will be completed by 2015, marked by the planned demolition of the existing SFOBB East Span. *Chart 1-Schedule of Remaining Projects* shows the Baseline AB 144/SB 66 project schedule versus the projected completion schedules for the TBSRP projects currently under construction.

Chart 1-Schedule of Remaining Projects



Program Funding and Financing

AB 144 established a funding level of \$8.685 billion for the TBSRP. The bill specifies program funding sources, as shown in *Table 5-Program Budget*.

**Table 5-Program Budget
as of September, 2008 (\$ Millions)**

	Budgeted	Funding Available & Contributions
Financing		
Seismic Surcharge Revenue AB 1171	2,282.0	2,282.0
Seismic Surcharge Revenue AB 144	2,150.0	2,150.0
BATA Consolidation	820.0	820.0
Subtotal - Financing	5,252.0	5,252.0
Contributions		
Proposition 192	790.0	789.0
San Diego Coronado Toll Bridge Revenue Fund	33.0	33.0
Vincent Thomas Bridge	15.0	6.9
State Highway Account ⁽¹⁾⁽²⁾	745.0	745.0
Public Transportation Account ⁽¹⁾⁽³⁾	130.0	130.0
ITIP/SHOPP/Federal Contingency	448.0	-
Federal Highway Bridge Replacement and Rehabilitation (HBRR)	642.0	642.0
SHA - East Span Demolition	300.0	
SHA - "Efficiency Savings" ⁽⁴⁾	130.0	10.0
Redirect Spillover	125.0	125.0
Motor Vehicle Account	75.0	75.0
Subtotal - Contributions	3,433.0	2,555.9
Total Funding	8,685.0	7,807.9
Allocated to date		6,900.1
Remaining Unallocated		907.8
<p>⁽¹⁾ The California Transportation Commission adopted a new schedule and changed the PTA/SHA split on December 15, 2005.</p> <p>⁽²⁾ To date, \$645 million has been transferred from the SHA to the TBSRP, including the full \$290 million transfer scheduled by the CTC to occur in 2005-06. An additional \$100 million has been expended directly from the account.</p> <p>⁽³⁾ To date, \$130 million has been transferred from the PTA to the TBSRP, including the full amount of all transfers scheduled by the CTC.</p> <p>⁽⁴⁾ To date, \$10 million has been transferred from the SHA to the TBSRP, representing the commitment of "Efficiency Savings" identified under AB 144. Approximately \$120 million remains to be distributed as scheduled by the CTC.</p> <p>Notes: Program budget includes \$900 million program contingency.</p>		

Funding Status

The program's financial status of revenues and expenditures is summarized in the table below, *Table 6-Toll Bridge Seismic Retrofit Program Financial Status*. The figures include the surcharge revenues collected, transfers from the SHA and the PTA, and expenditures from the Toll Bridge Seismic Retrofit Account (TBSRA) and the Seismic Retrofit Bond Act of 1996 (Proposition 192).

**Table 6-Toll Bridge Seismic Retrofit Program Financial Status as of
September 30, 2008 (\$ Millions)**

Revenues:	
Toll Surcharge ⁽¹⁾	687.9
SMIF Interest	97.9
Bond Revenue (Seismic Bond of 1996)	789.0
Bond Revenue (Toll Revenue Bonds)	1,062.0
Commercial Paper ⁽²⁾	80.0
SANDAG	33.0
Vincent Thomas ⁽³⁾	6.9
Federal Highway Bridge Replacement and Rehabilitation	600.0
Transfers to TBSRA:	
Motor Vehicle Account	75.0
State Highway Account ⁽⁴⁾	745.0
Public Transportation Account ⁽⁵⁾	130.0
State Highway Account "Efficiency Savings" ⁽⁶⁾	10.0
Total Revenues and Transfers	4,316.7
Expenditures :	
Capital Outlay	4,201.5
State Operations	1,127.4
Total Expenditures	5,328.9
Encumbrances:	
Capital Outlay	1,557.5
State Operations	13.7
Total Encumbrances	1,571.2
Total Expenditures and Encumbrances	6,900.1
<p>(1) The Toll Surcharge is dedicated to repayment of bonds beginning September 1, 2003. Toll Surcharge shown here is only toll revenue collected prior to that date.</p> <p>(2) \$80 Million in Commercial Paper issued on or about April 5, 2005.</p> <p>(3) No additional funding is expected from the Vincent Thomas Toll Revenue Account.</p> <p>(4) To date, \$645 million has been transferred from the SHA to the TBSRP, including the full \$290 million transfer scheduled by the CTC to occur in 2005-06. An additional \$100 million has been expended directly from the account.</p> <p>(5) To date, \$130 million has been transferred from the PTA to the TBSRP, including the full amount of all transfers scheduled by the CTC.</p> <p>(6) To date, \$10 million has been transferred from the SHA to the TBSRP, representing the commitment of "Efficiency Savings" identified under AB 144. Approximately \$120 million remains to be distributed as scheduled by the CTC.</p>	

Program Financing

As discussed on the previous page, AB 144 consolidated the administration of all toll revenues collected on the state-owned Bay Area toll bridges and financing of the TBSRP under the jurisdiction of BATA. BATA has direct programmatic responsibilities for the administration of all toll revenues collected on the state-owned bridges in the Bay Area and responsibilities for financial management of the TBSRP program, including:

- administrative responsibility for collection and accounting of all toll revenues
- authorization to increase tolls on the state-owned bridges by \$1.00, effective January 1, 2007
- project level toll-setting authority as necessary to cover additional cost increases beyond the funded program contingency in order to complete the TBSRP
- assumption of funding all of the roadway and bridge structure maintenance from Caltrans once bridge seismic retrofit projects are completed

In accordance with its responsibilities provided under the law, in September 2005 BATA adopted a finance plan for the TBSRP. The major components of the finance plan include:

- issuing \$6.2 billion in debt, including defeasance of \$1.5 billion in outstanding State Infrastructure Bank (I-Bank) bonds and commercial paper
- increasing tolls on the state-owned bridges by \$1.00 (from \$3.00 to \$4.00 for two-axle vehicles), effective January 1, 2007
- securing the maximum amount of state funding early in the construction schedule to most efficiently use toll funds (see the following discussion concerning the California Transportation Commission (CTC) funding schedule)
- locking in current interest rates to the extent possible in order to improve the likelihood that the entire toll program construction and the operations and maintenance can be delivered within the \$4.00 auto toll level.

In March 2006, BATA approved the issuance of \$1.2 billion in bonds to defease the I-Bank bonds

approved in October 2005. Additionally, pursuant to the law, BATA held two public hearings - one in October and one in November 2005 - to receive public testimony regarding the proposed \$1.00 seismic surcharge toll increase that began on January 1, 2007 on the state-owned toll bridges in the Bay Area. BATA approved the toll increase on January 25, 2006.

Pursuant to AB 144, on September 29, 2005, the CTC adopted a schedule, revised in December 2005, for the transfer of state funds to BATA to fund the TBSRP. The schedule contains the timing and sources of the state contributions, which began in Fiscal Year (FY) 2005-06, and distributes the contributions over the years of project construction to ensure a timely balance between state sources and the contributions from toll funds. In December 2005, the CTC re-adopted the schedule to reflect opportunities maximizing the use of available PTA funds and correct prior transfer transactions. The CTC's December 2005 revised schedule for the transfer of funds allows BATA to pledge the state fund contribution to the financing of the TBSRP per BATA's adopted finance plan. The CTC schedule is included in Appendix C.

In June 2008, BATA refunded \$500 million of the Series 2006 XL Capital auction rate bonds and variable rate demand notes. In July 2008, BATA was requested to approve the refunding of \$715 million in Ambac-insured bonds. The bonds were reissued as uninsured fixed rate bonds. The BATA total debt portfolio is approximately \$5.2 billion.



Project Status

Ongoing Construction Projects

SFOBB West Approach

The SFOBB West Approach Seismic Retrofit Project will remove and replace the west approach to the SFOBB, which includes all of the westbound mainline and most of the eastbound mainline from 4th Street to the SFOBB west anchorage, and all of the connecting entrances and exit ramps in downtown San Francisco. Upon completion of the retrofit project, the west approach mainline and ramps will have the same number of traffic lanes as before, but with improved highway geometrics. The mainline eastbound and westbound structures will be adjacent to each other at 4th Street and transition to a double-deck configuration with their own independent support system from Rincon Hill to the anchorage in order to tie into the existing SFOBB.

Milestones Achieved

Caltrans certified seismic safety for the West Approach structures ahead of schedule on December 22, 2008. Caltrans and its contractor will be completing final closeout and punchlist work on the contract through the first quarter of 2009. The Sterling Street eastbound on ramp opened on its final alignment in November 2008 and the Harrison Street westbound off ramp will be reopened by late February 2009.

The TBPOC revised the overall project budget to \$470.7 million during the fourth quarter of 2008 to cover final project closeout costs and costs associated with achieving early project completion, while minimizing impacts to the public and remaining construction risk. Savings from the sale of excess project right-of-way upon project completion will be available later to offset project costs.

The overall project budget and forecast remains within the overall TBSRP program contingency

capacity and will result in no change to the overall program budget. (See *Table 7- Current West Approach Project Budget and Forecast*).



The West Approach

Table 7-Current West Approach Project Budget and Forecast (\$ Millions)

	Current Approved Budget	4th Quarter 2008 Forecast	Difference
COS	120.0	120.0	-
CO	350.7	350.7	-
Total	470.07	470.7	-

SFOBB East Span Seismic Replacement

The east span of the San Francisco-Oakland Bay Bridge (SFOBB) will be seismically retrofitted through the complete replacement of the existing span. The project is split into four distinct elements; the Oakland Touchdown Approach Structures (OTD), Skyway Structures, Self-Anchored Suspension Span (SAS), and Yerba Buena Island Transition Structures (YBITS).

To facilitate construction flow and acceleration of work off the critical path for project completion, the OTD, SAS, and YBITS elements have been split into multiple contracts.

Including contracts for the interim retrofit and final demolition of the existing east span, the SFOBB East Span Seismic Safety Project now consists of 21 contracts.

Twelve contracts are **complete**:

- Interim Retrofit (Existing Bridge)
- East Span Retrofit (Existing Bridge)
- Pile Installation Demonstration
- OTD Geofill
- YBI Archaeology
- United States Coast Guard (USCG) Road Relocation on YBI
- SAS Land Foundations (W2)
- YBI Electrical Substation
- OTD Submarine Cable
- Skyway
- SAS Marine Foundations (E2/T1)
- Stormwater Treatment Measure

Three contracts are under **construction**:

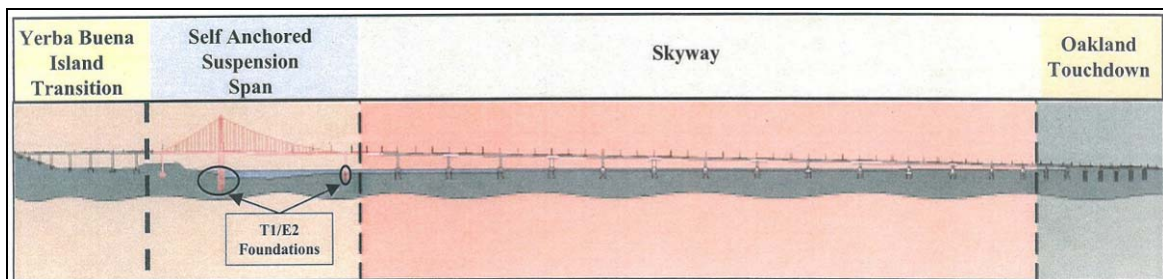
- YBID (including YBITS)
- SAS Superstructure
- OTD #1

Six contracts are in **design**:

- YBITS #1: The contract has been advertised
- YBITS #2: (design 80 percent complete to date)
- YBITS #3 landscaping contract
- OTD #2 contract: The contract is planned to be advertised in summer 2010
- OTD portions of the corridor electrical contract: This scope may be executed as a separate contract, or alternatively, may be included within the OTD #2 contract and/or the other contracts within the east span corridor. A 35 percent PS&E package was completed in late 2008. An informed decision will be made on whether to include the corridor electrical work into an existing contract, or to have it as a separate contract.
- Existing Bridge Demolition design (10 percent complete to date)

The forecast completion date as compared to the AB 144/SB 66 baseline completion date for each of the major components of the SFOBB East Span Seismic Replacement project is shown in *Table 8-SFOBB East Span Seismic Replacement Project Schedule Summary* below.

The approved east span opening date has been extended by 12 months by the TBPOC through an addendum issued on the SAS contract based on bidder inquiries received during advertisement.



SFOBB East Span Replacement Project

The current approved schedule does not include the potential for schedule reduction based on an early completion incentive on the SAS contract of six months that was also included in the addendum.

Similarly, the schedule for the YBID contract was extended to take into account the 12-month change to the SAS contract schedule and the incorporation of additional work scope from the YBITS contract. This extension is not expected to affect the new east span open-to-traffic date.



OBG (Orthotropic Box Girder) Side Panel Grinding

Table 8-SFOBB East Span Seismic Replacement Project Schedule Summary

Contract	AB 144/SB 66 Baseline Pro	Approved Changes	Current Approved Schedule	3rd Quarter 2008 Forecast Project Completion Date	Variance (Months)
Skyway	April 2007	8	December 2007	December 2007	-
YBI Detour*	July 2007	36	June 2010	June 2010	-
Stormwater Treatment	March 2008	-	March 2008	March 2008	-
SAS E2/T1 Foundations	June 2008	(3)	March 2008	January 2008	(2)
Open to Traffic: Westbound	September 2011	12	September 2012	September 2012	-
SAS Superstructure	March 2012	12	March 2013	March 2013	-
Open to Traffic: Eastbound	September 2012	12	September 2013	September 2013	-
Oakland Touchdown (OTD)	December 2013	12	December 2014	December 2014	-
OTD Submarine Cable	n/a		January 2008	January 2008	-
OTD No. 1 (Westbound)	n/a		January 2010	January 2010	-
OTD No. 2 (Eastbound)	n/a		November 2014	November 2014	-
YBI Transition Structure*	December 2013	12	November 2014	November 2014	-
Existing Bridge Demolition*	September 2014	12	September 2015	September 2015	-

Note: The new east span forecast to be fully open to traffic in September 2013. Construction activities will continue beyond that date to complete the project, including demolition of the existing structure.

Milestones Achieved – East Span Contracts

Skyway Contract

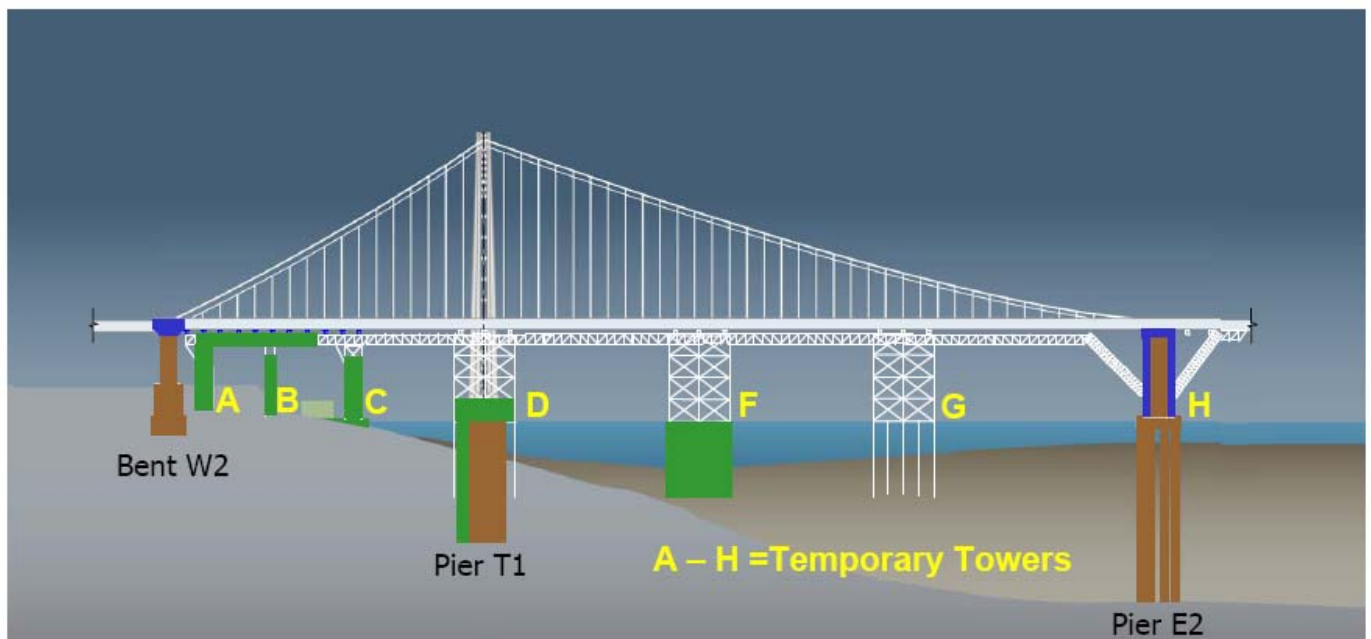
- The Skyway Contract constructed a pair of 1.3-mile long pre-cast segmental concrete bridges that will each carry five lanes of traffic with shoulders. The eastbound structure (to the south) also features a pedestrian/bike path. Substantially completed by the end of 2007, Caltrans accepted the contract on March 24, 2008 upon completion of final punchlist items. The TBPOC has revised the contract budget to close out at \$38.9 million in project savings at a final budget of \$1,254.1 million.

Self-Anchored Suspension Bridge Contracts

- The Self-Anchored Suspension span is being constructed under three separate contracts. The foundations to the span were constructed by the W2 Land and E2/T1 Marine contracts. Both contracts are now complete. American Bridge/Fluor (ABF) is constructing the SAS span, which features a single 525-foot steel tower supporting two parallel steel roadway decks over the shipping channel, under a single contract.
- The SFOBB East Span Seismic Replacement Project SAS Superstructure contract is 38 percent complete based on payments to the contractor as of December 2008.

Ongoing field and marine work includes the construction of the permanent bent and pier caps

SAS Superstructure Fieldwork Construction Progress



- SAS field work to be completed
- SAS temporary field work in progress
- Completed field work under prior W2 and E2/T1 contracts
- Permanent SAS field work

at W2 and E2 and erection of temporary structures (see the SAS progress diagram on page 15) that will support the steel bridge deck of the SAS structure during construction.

A labor dispute arose in December 2008 involving the off-loading of the temporary structures from a ship while tied off to the job site dock. Multiple labor unions claimed jurisdiction over the work and Caltrans resolved the dispute by off-loading the shipment in the middle of the bay instead of the dock. The contractor and the TBPOC are working to resolve the dispute for future shipments.

Various portions of the bridge are under fabrication around the world. Zhenhua Port Machinery Company (ZPMC), of Shanghai, China, has been subcontracted by American Bridge/Fluor (ABF) to supply and fabricate the steel deck and tower elements of the SAS. Caltrans has audited the ZPMC facilities and has organized quality assurance resources in China that will ensure an effective owner's presence in the steel fabrication shops.

While significant progress has been made on the decks and towers, the SAS contractor has stated that the fabrication schedule for the roadway boxes is behind schedule. This delay may increase and result in additional cross-impacts to the corridor schedule. (See "Risk Management Program" on page 24 for more information.)

The contractor and TBPOC have negotiated a tentative agreement to mitigate fabrication delays. The agreement is expected to be finalized in the first quarter of 2009. The cost for this agreement is within the contract contingency set aside for these types of issues and should not affect the program contingency or budget. The TBPOC and contractor continue to evaluate options to accelerate the project.

A large barge-mounted crane needed to erect the new bridge has been completed and will arrive in the Bay Area in February 2009.

All permanent foundations for the SAS were completed in January 2008 with the acceptance of the E2/T1 SAS Marine Foundation contract. The E2/T1 contract completed the main tower foundation at T1 and the foundations and columns at the first pier east of main tower at E2. The TBPOC has revised the contract budget to close out at \$32.6 million in project savings that can be returned to the program.



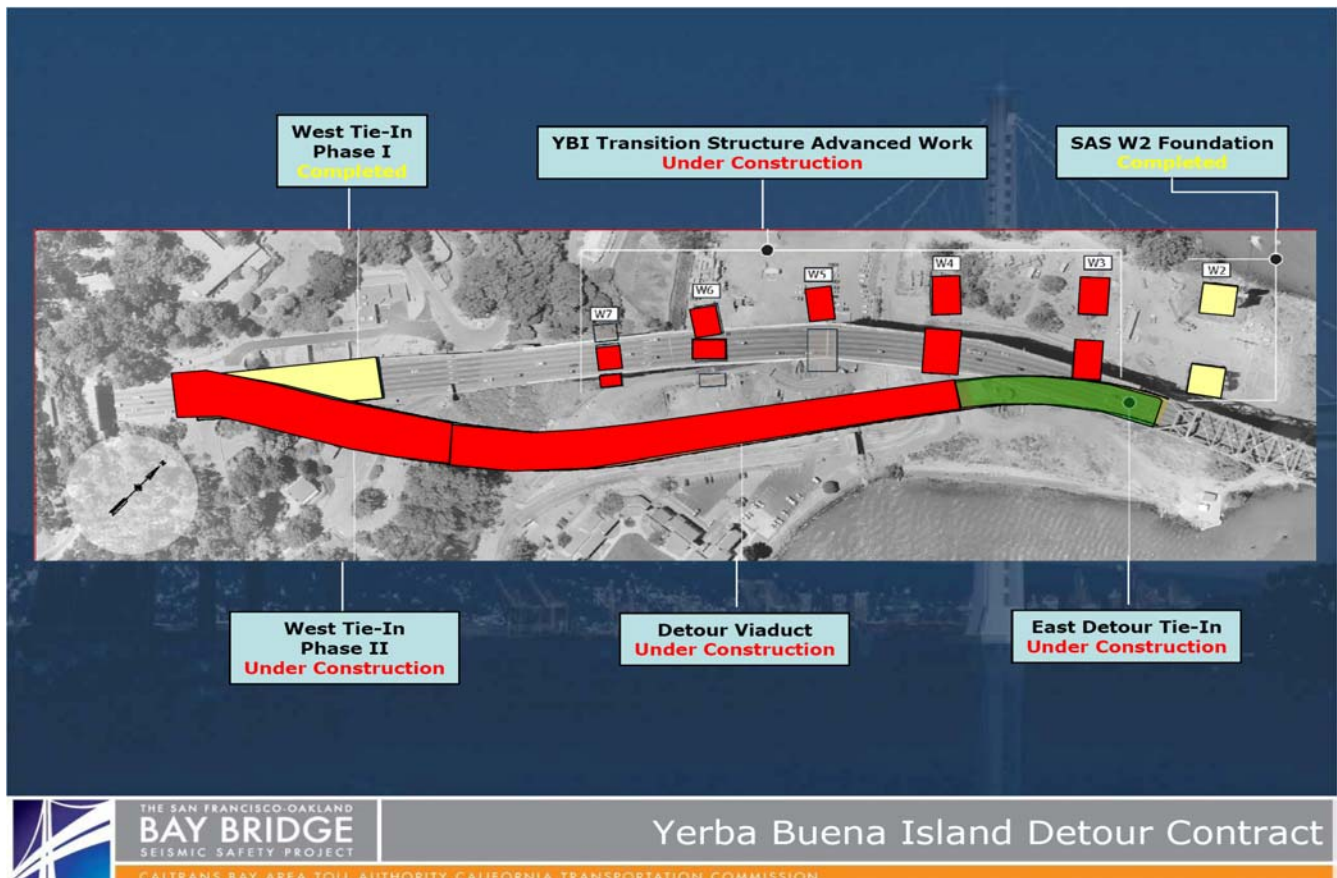
Temporary Tower Erection

Yerba Buena Island Contracts

- The Yerba Buena Island contract involves constructing a temporary detour from the tunnel to the existing east span to be followed by the construction of new transition approach structures from the SAS to the YBI tunnel. The work is being constructed under four separate contracts: YBI Detour (YBID), YBI Transition Structures (YBITS) #1 Mainline Structures, YBITS #2 Post Traffic Switch, and YBITS #3, Landscaping.
- The YBI Detour (YBID) contract was awarded in early 2004 to CC Myers to construct a temporary detour structure providing for, at that time, the SAS to open in 2006. Due to the re-advertisement of the SAS superstructure contract in 2005, the bridge opening was rescheduled to 2013, which necessitated a temporary suspension of the YBI Detour contract and significant design changes. The required suspension of work and design revisions have resulted in increased costs for the YBID contract.

In 2006, the TBPOC approved a plan to pace work on the YBID, to have Caltrans assume design responsibility over the east and west tie-ins, and to make changes to the detour structures to allow it to stand in place alone for a longer duration than originally intended. The YBID contract is now forecast to be completed in 2010 consistent with the planned westbound opening date of 2012 for the new bridge.

For the detour viaduct, the contractor, CC Myers, has completed the foundations for the detour viaduct and is currently completing the viaduct truss. Foundations for west tie-in phase II have been completed and the work is now ongoing for the reinforced concrete bridge superstructure. On the east detour tie-in, the contractor is erecting the steel support structures that will hold up the roll-out section of the existing bridge and roll-in section of new detour truss. Fabrication of the roll-in structures, including the skid beams and truss, continues in Arizona and Washington.



In addition to the aforementioned changes, the TBPOC moved selected bridge foundation work from YBITS #1 contract to be advanced by the detour contract. Advancing the work reduced potential risks from construction delays on bridge foundations and better utilized the extended schedule of the detour contract. Currently, as part of the advanced work, the contractor, CC Myers, has completed a number of the foundations and columns at piers W3, W4 and W6 for the advanced YBITS locations.

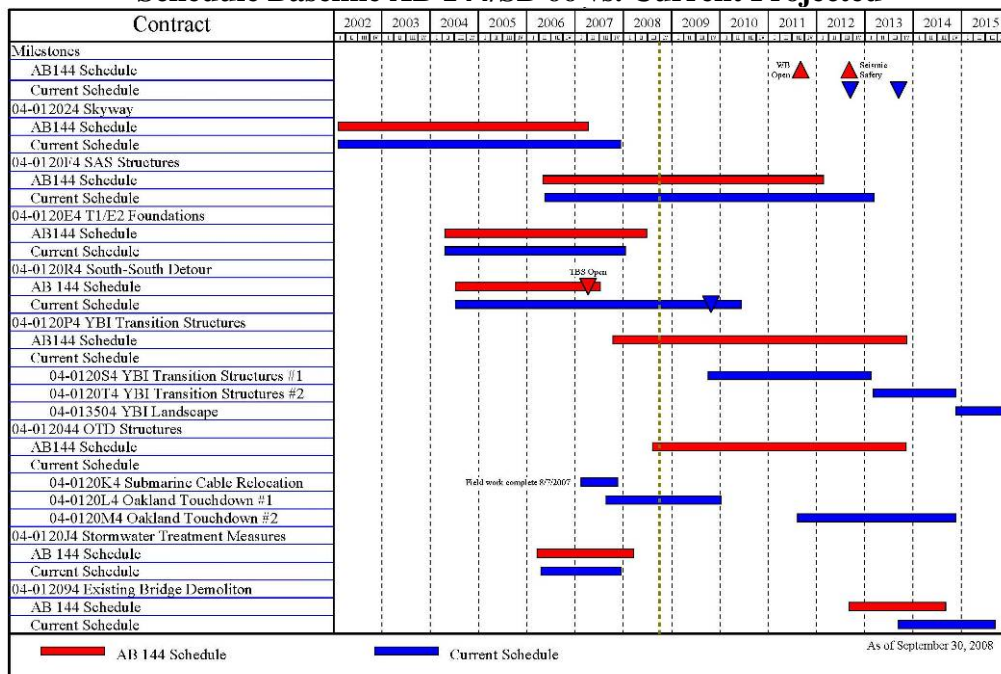
Significant construction risks have been identified that required additional funds to be budgeted for the project. In June 2008, the TBPOC approved a revised project budget of \$442.2 million for the project that is \$107.8 million higher than the previously approved budget. The revised forecast for the project is \$461.2 million, which includes additional contingencies to cover the potential project risks. The budget change will be funded from the TBSRP program contingency and redirected project savings from other contracts.

- The YBITS #1 contract will construct the approach structures necessary to connect the new SAS to the existing YBI tunnel. To

minimize schedule and construction risk, the TBPOC approved the option to accelerate portions of YBITS #1 work by shifting critical foundation work to the YBID contractor. The remaining YBITS #1 contract was advertised in August 2008. Caltrans held a contractors' outreach for the contract in September 2008. An addendum was issued on October 24, 2008 to change the bid opening date from January 13, 2009 to July 14, 2009.

- The YBITS #2 contract includes demolition of the YBID temporary structure, completion of the new eastbound on-ramp, completion of the bike path section on YBI and reconstruction of local and affected facilities at YBI. The majority of the design work is complete. Preparation of detailed plans and quantity calculations is in progress.
- The YBITS #3 contract is for landscaping, and includes slope restoration, vegetation restoration and plant maintenance for the areas affected by YBI construction. A planting concept and preliminary plans have been developed for a majority of the area.

**Chart 2-San Francisco-Oakland Bay Bridge East Span Corridor
Schedule Baseline AB 144/SB 66 vs. Current Projected**



Oakland Touchdown Contracts

- The Oakland Touchdown (OTD) contracts will construct the twin approach structures from just west of the metering lights at the toll plaza to the Skyway. The work is being constructed under two separate contracts – OTD #1 and OTD #2.

The OTD #1 will construct the complete northern westbound approach structure and most of the substructure to the southern eastbound approach structure. The completion of the eastbound structure will not occur until the westbound traffic is switched to the SAS in 2012 due to the existing structure overlapping the new eastbound alignment. The eastbound structure will be completed as part of the OTD #2 contract.

- Caltrans awarded the OTD #1 contract to MCM Construction on July 17, 2007. The work started on the contract on August 22, 2007. Overall construction is scheduled to be completed by November 2009.

The project is approximately 68 percent complete based on expended value of the contract as of December 20, 2008. On the westbound approach bridge, the contractor has completed all foundation work and is now proceeding on the superstructure. Installation of reinforcing steel on the deck is ongoing, with the first concrete pour completed December 2008.

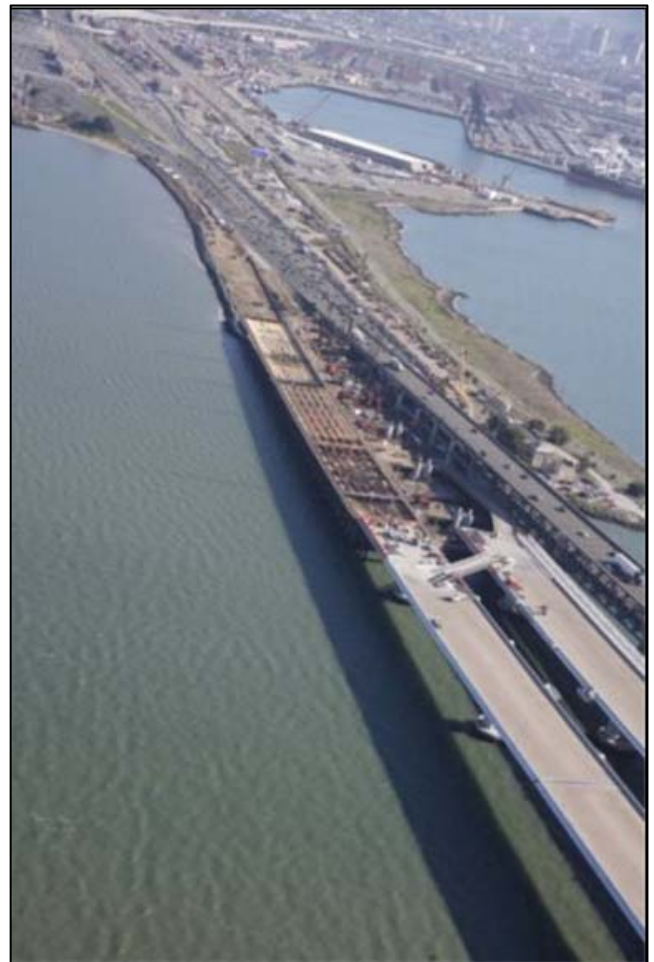
The detailed progress status of the project can be viewed on the OTD #1 progress diagram on page 39, Appendix F.

- The OTD #2 contract involves constructing the remaining eastbound bridge section from the new Skyway to the roadway west of the Oakland Toll Plaza. This work will occur once the westbound traffic is shifted onto the new SAS. Design work for the structures portion of the OTD #2 contract is substantially complete.

Design work on the roadway portion is ongoing.

Other Major Ongoing Contracts

- Design of the Existing Bridge Demolition contract is 10 percent complete, though design work has been temporarily suspended to assign engineering resources to higher priority tasks, and will resume at a later time. The contract schedule completion date has been extended by 12 months due to a 12-month SAS contract extension. The \$17.2 million decrease in construction costs for the Existing Bridge Demolition contract is due to a re-evaluation of cost escalation rates for the contract.



Oakland Touchdown

Project Funding

The AB 144/SB 66 baseline budget for the SFOBB East Span is \$5.487 billion. The current approved budget for SFOBB East Span is \$5,702.1 billion. See *Table 9-SFOBB East Span Replacement Cost Summary*.

The TBPOC reevaluates project and contract cost forecasts on a continual basis. The current **fourth quarter** 2008 forecast of \$5,730.0 billion for the project, based upon the risk management effort and other project information, includes the following revisions:

- A budgeted \$38.9 million decrease for the Skyway contract from project savings after contract closeout.
- A budgeted \$32.6 million decrease for the SAS E2/T1 Foundations contract from project savings after contract closeout.
- A budgeted \$310.2 million and a forecasted \$19 million increase for the YBID contract for construction risks and contingencies identified for the contract based on the fourth quarter 2007 risk management effort. These risks are focused on higher construction costs to tie in the detour viaduct to the existing east spans and schedule risks.
- A forecast increase in the cost of Capital Outlay Support (COS) to \$17.8 million, as a result of a detailed staffing and consultant contract cost forecast review.
- A forecast \$13.7 million increase for the SAS superstructure contract to cover actions taken to encourage additional bidders for the project, including the bidders' stipend for the lowest three responsive bidders.
- A forecast \$13.7 million increase for the SAS superstructure contract to cover some delay risks and other challenges as identified in the second quarter 2008 risk management effort.
- The SAS Superstructure contractor has submitted a schedule update that shows fabrication of the deck and tower to be about six months behind schedule. Caltrans and the contractor are developing options to mitigate the fabrication delays. If mitigation of the SAS delays does not occur, the 6-month delay reported by the SAS Contractor may increase and result in additional cross-impacts to the corridor schedule. This issue has been incorporated in the risk register and is likely to result in additional risks being identified in upcoming quarters. This potential cost and schedule risks have not yet been incorporated into the project forecast pending further risk mitigation evaluation. The cost of this risk is significant and could have cross-impacts other contracts.
- A forecast \$17.2 million decrease for the Bridge Demolition Contract due to a reevaluation of the cost escalation rates for the project.
- All of the variances discussed above can be funded from a combination of other budgeted capital and Toll Bridge Seismic Retrofit Program Contingency.

Project Schedule

The current schedule calls for achieving seismic safety and opening the SFOBB new east span to traffic in 2013. The 12 months of schedule extension from the AB144 baseline schedule was granted by addenda to the SFOBB East Span Seismic Replacement Project SAS contract based on bidder inquiries received during advertisements.

While the 12-month schedule extension for the SAS has also extended the schedules for YBITS and OTD contracts accordingly, the TBPOC is scheduling the contracts to accommodate the possibility of opening the SAS earlier than currently forecast.

It is estimated that all of the construction activities for the SFOBB East Span Seismic Replacement project will be completed by 2015.

The comparison of the AB 144/SB 66 baseline schedule and the current projected schedule is shown in *Chart 2-SFOBB East Span Corridor Schedule Baseline AB 144/SB 66 vs. Current Projected* on page 18. It should be noted that the schedules shown in *Chart 2* do not at this time account for the potential risks that may affect the schedule identified in the SFOBB East Span Seismic Retrofit Project Risk Register.

of identified risks. (See “Risk Management Program” on page 25 for more information.)

Major Risk Issues

SFOBB East Span Project Replacement Risk Management Plan

Caltrans continues to implement comprehensive risk management on all SFOBB East Span Seismic Replacement Project contracts in accordance with AB 144. Currently, Caltrans BATA, and CTC have embarked on an initiative to manage risk jointly.

Risk response efforts continue to focus on encouraging responsive bids for future contracts and mitigating the estimated cost/schedule impact

Table 9-SFOBB East Span Replacement Cost Summary (\$ Millions)

Contract	AB 144/SB 66 Budget	Approved Changes	Current Approved Budget	Cost To Date (09/2008)	4thQuarter 2008 Forecast	Variance
a	b	c	d = b + c	e	f	g = f - d
Capital Outlay Support	959.3	-	959.3	646.6	977.1	17.8
Capital Outlay	-	-	-	-	-	-
Skyway	1,293.0	(38.9)	1,254.1	1,236.5	1,254.1	-
SAS E2/T1 Foundations	313.5	(32.6)	280.9	274.5	280.9	-
SAS Superstructure	1,753.7	-	1,753.7	528.9	1,767.4	13.7
YBI Detour	132.0	310.2	442.2	233.2	461.2	19.0
YBI Transition Structures	299.3	(23.2)	276.1	-	276.1	-
* YBITS 1				-	214.3	
* YBITS 2				-	58.5	
* YBITS 3 - Landscape				-	3.3	
Oakland Touchdown	283.8	-	283.8	123.0	302.5	18.7
* OTD Submarine Cable				7.9	9.6	
* OTD Westbound				115.2	226.5	
* OTD Eastbound				-	62.0	
* OTD Electrical Systems				-	4.4	
Existing Bridge Demolition	239.2	-	239.2	-	222.0	(17.2)
Stormwater Treatment Measures	15.0	3.3	18.3	16.6	18.3	-
East Span Completed Projects	90.3	-	90.3	89.2	90.3	-
Right-of-Way and Environmental	72.4	-	72.4	39.3	72.4	-
Other Budgeted Capital	35.1	(3.3)	31.8	0.7	7.7	(24.1)
TOTAL	5,486.6	215.5	5,702.1	3,188.5	5,730.0	27.9

Quarterly Environmental Compliance Highlights

Overall environmental compliance for the SFOBB East Span project has been a success. All weekly, monthly and annual compliance reports to resource agencies have been delivered on time. There are no comments from receiving agencies. The tasks for the current quarters are focused on mitigation monitoring. Key successes in this quarter are as follows:

- Bird monitoring was conducted weekly in the active construction areas. Peregrine falcon monitoring for the 2009 nesting season started the first week of December.
- Turbidity monitoring was conducted without incident during pier construction at Oakland Touchdown and during coffer cell removal at Temporary Tower C.
- Marine mammal, hydro-acoustic and bird predation monitoring were conducted at Temporary Tower F for the SAS contract.
- Amendment 22, for construction of a temporary crane runway platform for the YBID was approved by the Bay Conservation and Development Commission (BCDC) on October 31, 2008.
- Caltrans took a proactive approach discussing pile driving and potential impacts to fish and marine mammals at the November 18, 2008 interagency.
- Amendment No. 23, for the installation of a goose fence, was submitted to BCDC on December 15, 2008.



The Endangered Peregrine Falcon

Completed Projects

Seismic retrofits and project closeout have been completed on the Richmond-San Rafael, Benicia-Martinez, Carquinez, San Mateo-Hayward, Vincent Thomas, San Diego-Coronado toll bridges and on the west span of the SFOBB. *(See Table 10-Cost Comparison AB 144/SB 66, Third Quarter 2008 Forecast and Expenditures through September 2008 for Completed Projects below.)*

Table 10-Cost Comparison AB 144/SB 66, Third Quarter 2008 Forecast and Expenditures through September 30, 2008 for Completed Projects (\$ Millions)

Project	AB 144/ SB 66 Budget	Approved Changes	Current Approved	Cost To Date (09/2008)	3rd Quarter Forecast	Variance
a	b	c	d = b + c	e	f	g = f - d
San Francisco-Oakland Bay Bridge West Span Seismic Retrofit Project	307.9	-	307.9	302.0	307.9	-
Carquinez Bridge Retrofit Project	114.2	-	114.2	114.2	114.2	-
Benicia-Martinez Bridge Retrofit Project	177.8	-	177.8	177.8	177.8	-
San Mateo-Hayward Bridge Retrofit Project	163.5	-	163.5	163.4	163.5	-
Richmond-San Rafael Bridge Retrofit Project	914.0	(97.5)	816.5	794.8	816.5	-
Vincent Thomas Bridge Retrofit Project	58.5	-	58.5	58.4	58.5	-
San Diego-Coronado Bridge Retrofit Project	103.5	-	103.5	102.6	103.5	-
TOTAL	1,839.4	(97.5)	1,741.9	1,713.2	1,741.9	-

Note: Details may not sum to totals due to rounding effects. Capital Outlay Support and Capital Outlay have been combined. Although seismic retrofit of the Richmond-San Rafael and San Diego-Coronado bridges are complete, environmental mitigation/monitoring work is ongoing.

Risk Management Program

Caltrans, CTC, and BATA continue to implement a comprehensive risk management effort to identify and mitigate potential cost and schedule risks on all the projects in the TBSRP. Risk registers for each project in the program are regularly updated to identify, assess and develop risk response strategies for potential project issues. Based on those registers, a potential draw on the program contingency can be quantified.

Risk Identification and Risk Response

The risk management effort has identified a number of risk areas that are critical to the successful delivery of the program. Caltrans has formed focus teams to formulate and implement opportunity and risk response strategies in each of these areas. Risk response priorities are focused on the current status of the SAS contract which is driving the corridor schedule. The following is a

summary of the most critical risk areas currently identified by the risk management:

1. Self-Anchored Suspension (SAS) Tower and Deck Fabrication

A number of challenges have been identified that could impact the timely delivery of the steel tower and deck section of the new bridge, including dimensional control/fit-up issues, constructability and resource challenges. The Fabrication Focus Team is developing strategies to mitigate risk and to accelerate fabrication, while meeting specified quality.

2. Schedule Delays and Cost Escalation

The Corridor Schedule Team is tasked with identifying schedule opportunities to mitigate potential schedule delays. The East Span Seismic Replacement Project is being constructed under a number of separate but interrelated contracts. Delays to any one contract may result in

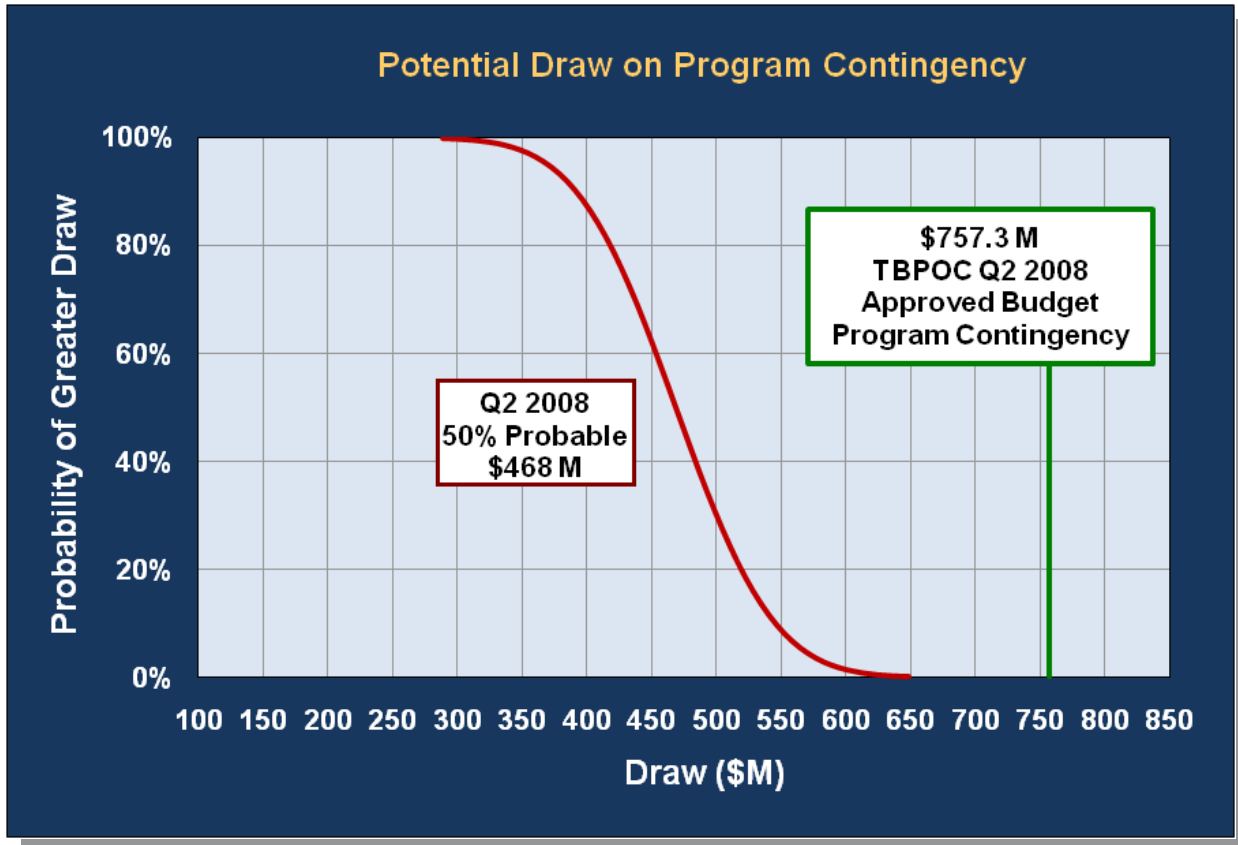


Figure 1. Potential Draw on Program Contingency

additional cross-impacts to other contracts resulting in further delays and/or cost escalations.

For example, the YBI Transition Structures (YBITS) contract depends on the SAS Phase 1 completion when the area around W2 is returned to the YBITS contractor to complete Frame 2 and perform the closure at Hinge K. A focus team is looking at options to bring the YBITS schedule in line with SAS Phase 1 completion and ways to keep Frame 2 on falsework for an extended time until the W2 area is cleared by the SAS Contractor.

3. Corridor Mechanical/Electrical/Piping Systems Integration

The mechanical/electrical/piping (MEP) systems on the new east span include the traffic operations, supervisory control and data acquisition, air, plumbing and 15 kV power distribution systems that run longitudinally across the 2.2-mile long bridge. In addition to those systems, additional security and architectural lighting may need to be integrated into the project. With the segregation of the project among the different contracts, system functionality, completeness, and integration has been identified as a major risk. An MEP team has been formed to develop an integration strategy for the project.

4. Capital Outlay Support

Capital outlay support costs have been identified as a major cost risk due to the potential for additional and escalating costs from possible schedule delays and extensions. Additional cost pressures have also resulted from the global nature of the project that has fabrication spread across three continents.

Updates to Risk Registers

The following is a summary of major risk management developments that have resulted in significant changes to the potential draw on program contingency, specifically during the second quarter of 2008:

- The SAS Superstructure contractor has submitted a schedule update that shows fabrication of the deck and tower to be about six months behind schedule. Caltrans and the contractor are developing options to mitigate the fabrication delays. If mitigation of the SAS delays does not occur, the six-month delay reported by the SAS contractor may increase and result in additional cross-impacts to the corridor schedule. This issue has been incorporated into the risk register and is likely to result in additional risks being identified in upcoming quarters. These potential cost and schedule risks have not yet been incorporated into the project forecast pending further risk mitigation evaluation. The cost of this risk is significant and could cross-impact other contracts.
- The price of construction materials, energy and commodities rose significantly in the second quarter. Moreover, the value of the United States dollar against foreign currency has dropped quite a bit. Operating cost volatility has also increased due to significant fuel price escalation. The risk registers were updated to reflect these market conditions. Prices are being monitored for any significant changes due to the current economic conditions and will be adjusted as new trends emerge.
- The Corridor Schedule Team identified opportunities to increase the likelihood that the traffic switch onto the YBI Detour will occur during the Labor Day weekend in 2009.

Adequacy of Program Reserves

AB 144 states that Caltrans must “regularly reassess its reserves for potential claims and unknown risks, incorporating information related to risks identified and quantified through its risk assessment processes.”

Each contract has a contingency allowance within its budget. The sum of these contingency allowances is compared to the total of CO, COS and program risks. Any excess of the risks over the contingency allowances represents a potential draw on the program contingency (the reserve). As of the end of the second quarter 2008, the potential draw on program contingency ranges from about \$300 million to \$650 million, as shown in the diagram below.

Figure 2 shows the trend of Program Contingency and the range of potential draw over the last six quarters.

The Program Contingency is currently at \$757.3 million according to the TBPOC Q2 2008 Approved Budget, down from \$785.1 million in the previous quarter. The budget of YBI Detour was increased, partially offset by funds were recovered from the completed Skyway and E2-T1 contracts.

The ranges depicted by the blue bars represent the uncertainty in the potential draw on Program

Contingency and are derived from the quantitative risk analyses results for each quarter.

The Program Contingency is currently sufficient to cover identified risks but the top end of the range of potential draw is getting closer to the Program Contingency balance in the second quarter of 2008.

Ongoing risk mitigation actions are being developed to reduce the potential draw on the Program Contingency.

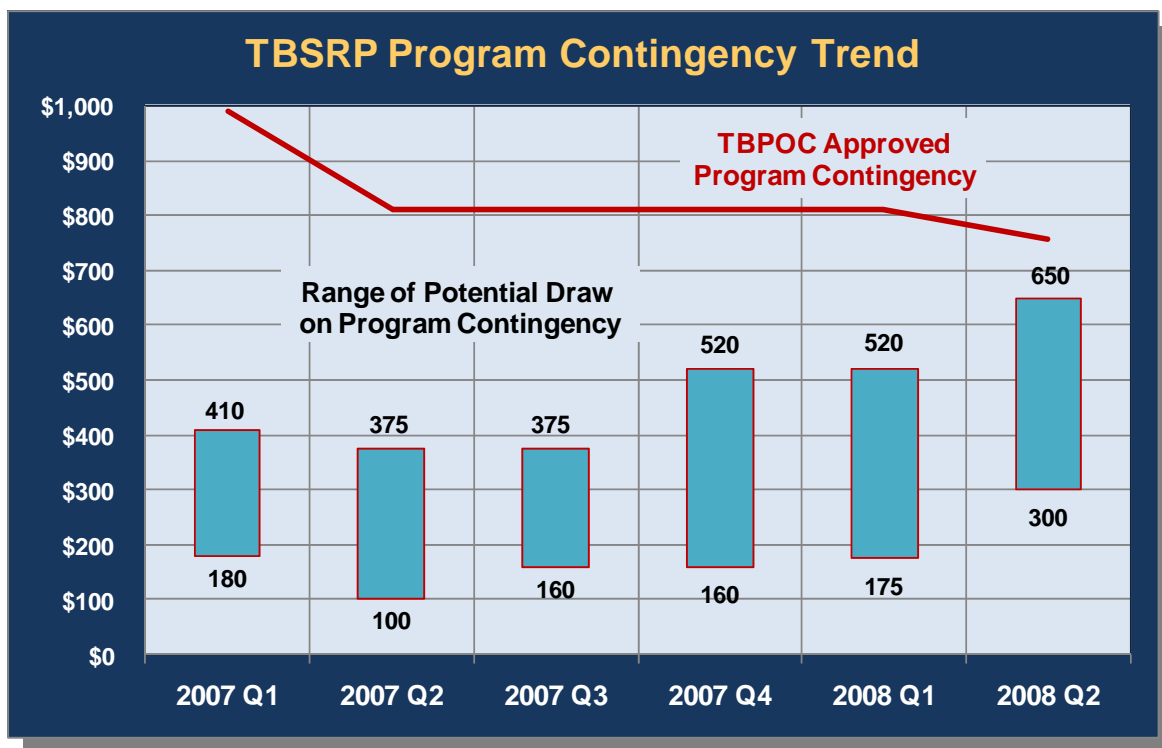


Figure 2. Program Contingency Trend

Other Toll Bridges

The Dumbarton Bridge

State Route 84 crosses the southern region of San Francisco Bay between the cities of Newark to the east and East Palo Alto to the west (see photo #29.1). The route consists of three lanes in each direction and an eight-foot bicycle/pedestrian lane. The annual average daily traffic (AADT) of the route is near 60,000. The bridge is over 2 km in length and is positioned in an approximately normal geometry between two seismic faults. The United States Geological Survey (USGS) reports that the San Andreas Fault, some 15 km to the west of the bridge, and the Hayward Fault, some 13 km to the east of the bridge, pose most of the significant seismic threat to the San Francisco Bay Area.

The Antioch Bridge

State Route 160 crosses the San Joaquin River between the city of Antioch and Sherman Island (leading to Rio Vista) via the Antioch Bridge (see photo #). The bridge carries a single lane of traffic in each direction. The AADT for the route is slightly over 10,000 vehicles per day. This bridge is threatened by the Bird's Landing Seismic Zone, Coast Range/Sierra Nevada Boundary Zone and the San Andreas Fault.

History

In late 2004, Caltrans initiated limited vulnerability studies of the Antioch Bridge and the Dumbarton Bridge. These studies were completed in May 2005. Based on the vulnerability studies and a follow-up sensitivity analysis, Caltrans and BATA developed a work plan to refine the seismic analysis and to assess the required performance levels of each structure, including new geotechnical analysis. In June 2006, BATA approved \$17.8 million in toll bridge rehabilitation funding to proceed with the comprehensive seismic analysis of the bridges. In September 2006, BATA entered into a consultant

contract to conduct geotechnical and geophysical investigations, which have been ongoing since December 2006. Based on the analysis, Caltrans determined that the Dumbarton and Antioch bridges require seismic retrofit.

A strategy meeting took place on August 22, 2008 for both projects and consensus by the project teams recommended retrofit strategies for both bridges. Both the Dumbarton and Antioch Bridge seismic retrofit strategies include installation of isolation bearings and strengthening of the piers above the water line. The Dumbarton Bridge retrofit strategy also includes superstructure and deck modifications and additional strengthening of the over-land approach slab structures. The Antioch Bridge retrofit strategy includes relatively minor modifications to the approach structure on Sherman Island. It was concluded at this meeting that foundation retrofit is not required for either bridge. The design teams presented their proposed strategy schemes and the results of their analysis to the Toll Bridge Seismic Safety Peer Review Panel on September 24, 2008.

Progress This Quarter

At the December 17, 2008 BATA meeting, a presentation was made updating the Authority on the Dumbarton and Antioch seismic retrofit evaluations and included the most recent schedules and cost projections. A total cost estimate of \$950 million for both projects was presented with construction contracts for both bridges scheduled to be awarded in 2010 and completed in 2012 (Antioch) and 2013 (Dumbarton).

Full funding for the project has not yet been identified, but will likely come from a combination of sources, such as toll increases, or other federal structures and toll bridges.

The design teams are continuing their work on the design plans for the projects. Risk management meetings were held in December 2008 and January 2009 to discuss the risks associated with the retrofit strategy for each

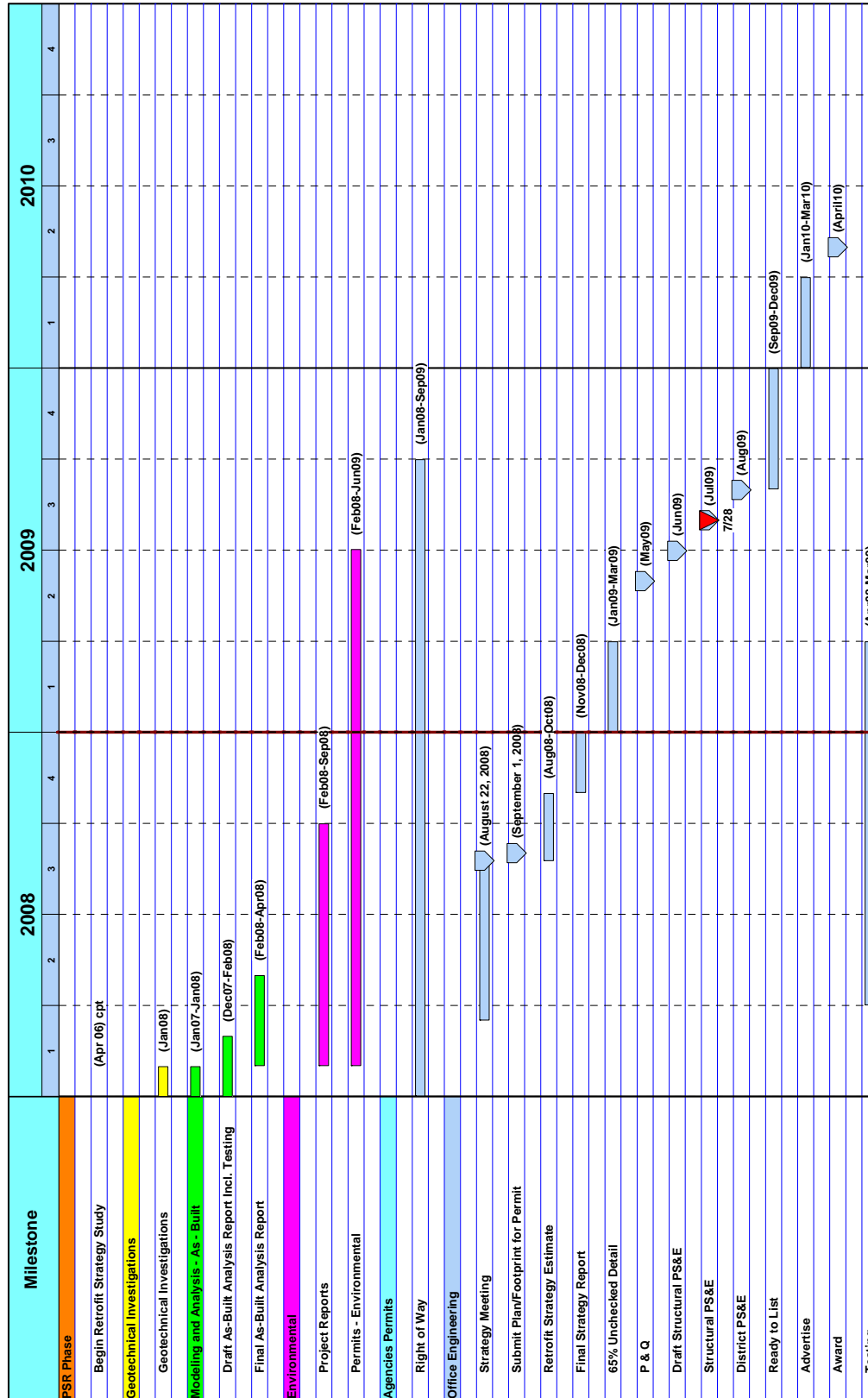
bridge. The design teams are continuing to meet with the appropriate regulatory agencies to discuss the scope of work and the schedules, as well as the environmental issues affecting both bridges.

Project specific design criteria for the Dumbarton Bridge retrofit project was supported by laboratory testing of a large scale mock-up (1/3 actual size, **see photo # 29.1**).

The environmental process is continuing for both projects, and once the design/retrofit strategy is completed, all the permit applications will be submitted to the appropriate agencies for approval.

(See schedule in on page 29).

**Chart 3 – Dumbarton and Antioch Bridges
Summary Schedule as of December 2008**



Summary of TBPOC Expenses

Pursuant to Streets and Highways Code Section 30952.1 (d), expenses incurred by Caltrans, BATA, and the California Transportation Commission (CTC) for costs directly related to the duties associated with the TBPOC are to be reimbursed by toll revenues. *Table 11-Toll Bridge Program Oversight Committee Estimated Expenses: July 1, 2005 through September 30, 2008* shows expenses through September 30, 2008 for TBPOC functioning, support, and monthly and quarterly reporting.

Table 11-Toll Bridge Program Oversight Committee

Estimated Expenses: July 1, 2005 through December 31, 2008 (\$ Millions)

Agency/Program Activity	Expenses
BATA	0.5
Caltrans	1.3
CTC	0.7
Reporting	2.3
Total Program	4.8

Appendices

- A. TBSRP All Bridges AB 144/SB 66 Baseline Budget, Forecasts, and Expenditures through December 31, 2008 (A-1 and A-2)
- B. TBSRP East Span Only AB 144/SB 66 Baseline Budget, Forecasts, and Expenditures through December 31, 2008
- C. CTC Fourth Quarter Schedule
- D. SFOBB West Approach Retrofit Progress Diagram/Mainline Eastbound 80 Rebuilding
- E. SFOBB Seismic Retrofit Project YBITS Progress Diagram
- F. SFOBB Seismic Retrofit Project Oakland Touchdown #1
- G. Project/Contract Photographs, Diagrams and Artist Renderings

Appendix A-1.

Toll Bridge Seismic Retrofit Program AB 144/SB 66 Baseline Budget, Forecasts, and Expenditures Through September 30, 2008						
(\$ millions)						
Bridge	AB 144/SB 66 Baseline	TBPOC Current Approved Budget	Second Quarter 2008 Forecast	Third Quarter 2008 Forecast	Variance (3rd Q08-2nd Q08)	Expenditures Through Sep 2008
Benicia-Martinez						
Capital Outlay Support	38.1	38.1	38.1	38.1	-	38.1
Capital Outlay	139.7	139.7	139.7	139.7	-	139.7
Total	177.8	177.8	177.8	177.8	-	177.8
Carquinez						
Capital Outlay Support	28.7	28.7	28.7	28.7	-	28.8
Capital Outlay	85.5	85.5	85.5	85.5	-	85.4
Total	114.2	114.2	114.2	114.2	-	114.2
San Mateo-Hayward						
Capital Outlay Support	28.1	28.1	28.1	28.1	-	28.1
Capital Outlay	135.4	135.4	135.4	135.4	-	135.3
Total	163.5	163.5	163.5	163.5	-	163.4
Vincent Thomas						
Capital Outlay Support	16.4	16.4	16.4	16.4	-	16.4
Capital Outlay	42.1	42.1	42.1	42.1	-	42.0
Total	58.5	58.5	58.5	58.5	-	58.4
San Diego-Coronado						
Capital Outlay Support	33.5	33.5	33.5	33.5	-	33.2
Capital Outlay	70.0	70.0	70.0	70.0	-	69.4
Total	103.5	103.5	103.5	103.5	-	102.6
Richmond-San Rafael						
Capital Outlay Support	134.0	127.0	127.0	127.0	-	126.7
Capital Outlay	780.0	689.5	689.5	689.5	-	668.1 *
Total	914.0	816.5	816.5	816.5	-	794.8
West Span Retrofit						
Capital Outlay Support	75.0	75.0	75.0	75.0	-	74.8
Capital Outlay	232.9	232.9	232.9	232.9	-	227.2
Total	307.9	307.9	307.9	307.9	-	302.0
West Approach						
Capital Outlay Support	120.0	120.0	120.0	120.0	-	110.0
Capital Outlay	309.0	333.7	350.7	350.7	-	292.5
Total	429.0	453.7	470.7	470.7	-	402.5
SFOBB East Span						
Capital Outlay Support	959.3	959.3	977.1	977.1	-	646.6
Capital Outlay	4,492.2	4,711.0	4,745.2	4,745.2	-	2,541.2
Other Budgeted Capital	35.1	31.8	7.7	7.7	-	0.7
Total	5,486.6	5,702.1	5,730.0	5,730.0	-	3,188.5
Miscellaneous Program Costs	30.0	30.0	30.0	30.0	-	24.7
Subtotal Capital Outlay Support	1,463.1	1,456.1	1,473.9	1,473.9	-	1,127.4
Subtotal Capital Outlay	6,321.9	6,471.6	6,498.7	6,498.7	-	4,201.5
Subtotal Toll Seismic Retrofit	7,785.0	7,927.7	7,972.6	7,972.6	-	5,328.9
Program Contingency	900.0	757.3	712.4	712.4	-	-
Total Toll Seismic Retrofit Program	8,685.0	8,685.0	8,685.0	8,685.0	-	5,328.9

Notes: * Budget for Richmond-San Rafael Bridge include \$16.9 million of deck joint rehabilitation work that's considered to be eligible for seismic retrofit program funding.
(Due to the rounding of numbers, the totals above are shown within \$0.1).

Appendix A-2.

Toll Bridge Seismic Retrofit Program - SAS Alternative					
AB 144 Baseline Budget, Forecasts and Expenditures Through September 30, 2008					
Bridge	(\$ in millions)				
	AB 144 Baseline Budget	TBPOC Current Approved Budget	Expenditures to date and Encumbrances as of Sep 2008 See Note (1)	Estimated Costs not yet Spent or Encumbered as of Sep 2008	Total Forecast as of Sep 2008
	(Columns C +D)				
Other Completed Projects					
Capital Outlay Support	144.9	144.9	144.6	0.3	144.9
Capital Outlay	472.6	472.6	472.6	0.1	472.7
Total	617.5	617.5	617.2	0.4	617.6
Richmond-San Rafael					
Capital Outlay Support	134.0	127.0	126.7	0.3	127.0
Capital Outlay	698.0	689.5	674.8	14.7	689.5
Project Reserves	82.0	-	-	-	-
Total	914.0	816.5	801.5	15.0	816.5
West Span Retrofit					
Capital Outlay Support	75.0	75.0	74.8	0.2	75.0
Capital Outlay	232.9	232.9	232.8	0.1	232.9
Total	307.9	307.9	307.6	0.3	307.9
West Approach					
Capital Outlay Support	120.0	120.0	111.3	8.7	120.0
Capital Outlay	309.0	333.7	324.8	25.9	350.7
Total	429.0	453.7	436.1	34.6	470.7
SFOBB East Span -Skyway					
Capital Outlay Support	197.0	181.0	181.4	(0.4)	181.0
Capital Outlay	1,293.0	1,254.1	1,400.0	(145.9)	1,254.1
Total	1,490.0	1,435.1	1,581.4	(146.3)	1,435.1
SFOBB East Span -SAS- Superstructure					
Capital Outlay Support	214.6	214.6	111.6	103.0	214.6
Capital Outlay	1,753.7	1,753.7	1,649.6	117.8	1,767.4
Total	1,968.3	1,968.3	1,761.2	220.8	1,982.0
SFOBB East Span -SAS- Foundations					
Capital Outlay Support	62.5	41.0	37.6	3.4	41.0
Capital Outlay	339.9	307.3	308.7	(1.4)	307.3
Total	402.4	348.3	346.3	2.0	348.3
Small YBI Projects					
Capital Outlay Support	10.6	10.6	10.2	0.4	10.6
Capital Outlay	15.6	15.6	16.2	(0.5)	15.7
Total	26.2	26.2	26.4	(0.1)	26.3
YBI Detour					
Capital Outlay Support	29.5	66.0	51.9	14.1	66.0
Capital Outlay	131.9	442.2	367.2	94.0	461.2
Total	161.4	508.2	419.1	108.1	527.2
YBI - Transition Structures					
Capital Outlay Support	78.7	78.7	16.4	62.3	78.7
Capital Outlay	299.4	276.1	0.1	276.0	276.1
Total	378.1	354.8	16.5	338.3	354.8
Oakland Touchdown					
Capital Outlay Support	74.4	74.4	45.4	46.7	92.1
Capital Outlay	283.8	283.8	219.1	83.4	302.5
Total	358.2	358.2	264.5	130.1	394.6
East Span Other Small Project					
Capital Outlay Support	212.3	213.3	202.8	10.5	213.3
Capital Outlay	170.8	170.8	93.0	53.6	146.6
Total	383.1	384.1	295.8	64.1	359.9
Existing Bridge Demolition					
Capital Outlay Support	79.7	79.7	0.4	79.3	79.7
Capital Outlay	239.2	239.2	-	222.0	222.0
Total	318.9	318.9	0.4	301.3	301.7
Miscellaneous Program Costs					
	30.0	30.0	26.1	3.9	30.0
Total Capital Outlay Support (2)	1,463.2	1,456.2	1,141.2	332.7	1,473.9
Total Capital Outlay	6,321.8	6,471.5	5,758.9	739.8	6,498.7
Program Total	7,785.0	7,927.7	6,900.1	1,072.5	7,972.6

Appendix B.

Toll Bridge Seismic Retrofit Program - SFOBB East Span Only AB 144/SB 66 Baseline Budget, Forecasts, and Expenditures Through September 30, 2008						
(\$ millions)						
East Span Contract	AB 144/SB 66 Baseline	TBPOC Current Approved Budget See Note (1)	Second Quarter 2008 Forecast	Third Quarter 2008 Forecast	Variance 3rd Q08 - 2nd Q08	Expenditures Through Sep 2008
SFOBB East Span -Skyway						
Capital Outlay Support	197.0	181.0	181.0	181.0	-	180.8
Capital Outlay	1,293.0	1,254.1	1,254.1	1,254.1	-	1,236.5
Total	1,490.0	1,435.1	1,435.1	1,435.1	-	1,417.3
SFOBB East Span -SAS- E2/T1 Foundations						
Capital Outlay Support	52.5	31.0	31.0	31.0	-	28.3
Capital Outlay	313.5	280.9	280.9	280.9	-	274.5
Total	366.0	311.9	311.9	311.9	-	302.8
SFOBB East Span -SAS- Superstructure						
Capital Outlay Support	214.6	214.6	214.6	214.6	-	105.6
Capital Outlay	1,753.7	1,753.7	1,767.4	1,767.4	-	528.9
Total	1,968.3	1,968.3	1,982.0	1,982.0	-	634.5
SFOBB East Span -SAS- W2 Foundations						
Capital Outlay Support	10.0	10.0	10.0	10.0	-	9.2
Capital Outlay	26.4	26.4	26.4	26.4	-	25.8
Total	36.4	36.4	36.4	36.4	-	35.0
YBI Detour						
Capital Outlay Support	29.4	66.0	66.0	66.0	-	49.8
Capital Outlay	132.0	442.2	461.2	461.2	-	233.2
Total	161.4	508.2	527.2	527.2	-	283.0
YBI - Transition Structures (Total, including the following split contracts and prior-to-split expenses)						
Capital Outlay Support	78.7	78.7	78.7	78.7	-	21.5
Capital Outlay	299.3	276.1	276.1	276.1	-	-
Total	378.0	354.8	354.8	354.8	-	21.5
YBI- Transition Structures Contract No. 1						
Capital Outlay Support			45.0	45.0		3.4
Capital Outlay			214.3	214.3		-
Total			259.3	259.3		3.4
YBI- Transition Structures Contract No. 2						
Capital Outlay Support			16.0	16.0		1.7
Capital Outlay			58.5	58.5		-
Total			74.5	74.5		1.7
YBI- Transition Structures Contract No. 3 - Landscape						
Capital Outlay Support			1.0	1.0		-
Capital Outlay			3.3	3.3		-
Total			4.3	4.3		-
Oakland Touchdown (Total, including the following split contracts and prior-to-split expenses)						
Capital Outlay Support	74.4	74.4	92.1	92.1	-	43.3
Capital Outlay	283.8	283.8	302.5	302.5	-	123.0
Total	358.2	358.2	394.6	394.6	-	166.3
Oakland Touchdown Contract - Submarine Cable						
Capital Outlay Support	-	-	3.0	3.0	-	0.9
Capital Outlay	-	-	9.6	9.6	-	7.9
Total	-	-	12.6	12.6	-	8.8
Oakland Touchdown Contract No. 1 (Westbound)						
Capital Outlay Support	-	-	49.9	49.9	-	20.7
Capital Outlay	-	-	226.5	226.5	-	115.2
Total	-	-	276.4	276.4	-	135.9
Oakland Touchdown Contract No. 2 (Eastbound)						
Capital Outlay Support	-	-	15.8	15.8	-	1.2
Capital Outlay	-	-	62.0	62.0	-	-
Total	-	-	77.8	77.8	-	1.2
Oakland Touchdown Contract - Electrical Systems						
Capital Outlay Support	-	-	1.4	1.4	-	0.5
Capital Outlay	-	-	4.4	4.4	-	-
Total	-	-	5.8	5.8	-	0.5

Appendix B. (Cont'd.)**AB 144/SB 66 Baseline Budget, Forecasts, and Expenditures Through June 30, 2008**

(\$ millions)						
East Span Contract	AB 144/SB 66 Baseline	TBPOC Current Approved Budget See Note (1)	Second Quarter 2008 Forecast	Third Quarter 2008 Forecast	Variance (3rd Q08 - 2nd Q08)	Expenditures Through Sep 2008
YBI/SAS (Archeology)						
Capital Outlay Support	1.1	1.1	1.1	1.1	-	1.1
Capital Outlay	1.1	1.1	1.1	1.1	-	1.1
Total	2.2	2.2	2.2	2.2	-	2.2
YBI - USCG Rd Relocation						
Capital Outlay Support	3.0	3.0	3.0	3.0	-	2.7
Capital Outlay	3.0	3.0	3.0	3.0	-	2.8
Total	6.0	6.0	6.0	6.0	-	5.5
YBI - Substation and Viaduct						
Capital Outlay Support	6.5	6.5	6.5	6.5	-	6.4
Capital Outlay	11.6	11.6	11.6	11.6	-	11.3
Total	18.1	18.1	18.1	18.1	-	17.7
Oakland Geofill						
Capital Outlay Support	2.5	2.5	2.5	2.5	-	2.5
Capital Outlay	8.2	8.2	8.2	8.2	-	8.2
Total	10.7	10.7	10.7	10.7	-	10.7
Pile Installation Demonstration Project						
Capital Outlay Support	1.8	1.8	1.8	1.8	-	1.8
Capital Outlay	9.2	9.2	9.2	9.2	-	9.2
Total	11.0	11.0	11.0	11.0	-	11.0
Existing Bridge Demolition						
Capital Outlay Support	79.7	79.7	79.7	79.7	-	0.4
Capital Outlay	239.2	239.2	222.0	222.0	-	-
Total	318.9	318.9	301.7	301.7	-	0.4
Stormwater Treatment Measures						
Capital Outlay Support	6.0	8.0	8.0	8.0	-	7.9
Capital Outlay	15.0	18.3	18.3	18.3	-	16.6
Total	21.0	26.3	26.3	26.3	-	24.5
Right-of-way and Environmental Mitigation						
Capital Outlay Support	-	-	-	-	-	-
Capital Outlay	72.4	72.4	72.4	72.4	-	39.3
Total	72.4	72.4	72.4	72.4	-	39.3
Sunk Cost - Existing East Span Retrofit						
Capital Outlay Support	39.5	39.5	39.5	39.5	-	39.5
Capital Outlay	30.8	30.8	30.8	30.8	-	30.8
Total	70.3	70.3	70.3	70.3	-	70.3
Environmental Phase (Expended)						
Capital Outlay Support	97.7	97.7	97.7	97.7	-	97.7
Project Expenditures, Pre-splits						
Capital Outlay Support	44.9	44.9	44.9	44.9	-	44.9
Non-project Specific Costs						
Capital Outlay Support	20.0	19.0	19.0	19.0	-	3.2
Subtotal East Span Capital Outlay Support	959.3	959.3	977.1	977.1	-	646.6
Subtotal East Span Capital Outlay and Sunk Costs	4,492.2	4,711.0	4,745.2	4,745.2	-	2,541.2
Other Budgeted Capital	35.1	31.8	7.7	7.7	-	0.7
Total SFOBB East Span	5,486.6	5,702.1	5,730.0	5,730.0	-	3,188.5

(1) Current contract allotment to install two submarine electrical cables is \$11.5 million. Additional non-program funding to support this allocation beyond the \$9.6 million of available programs funds has been made available by the Treasure Island Development Authority.

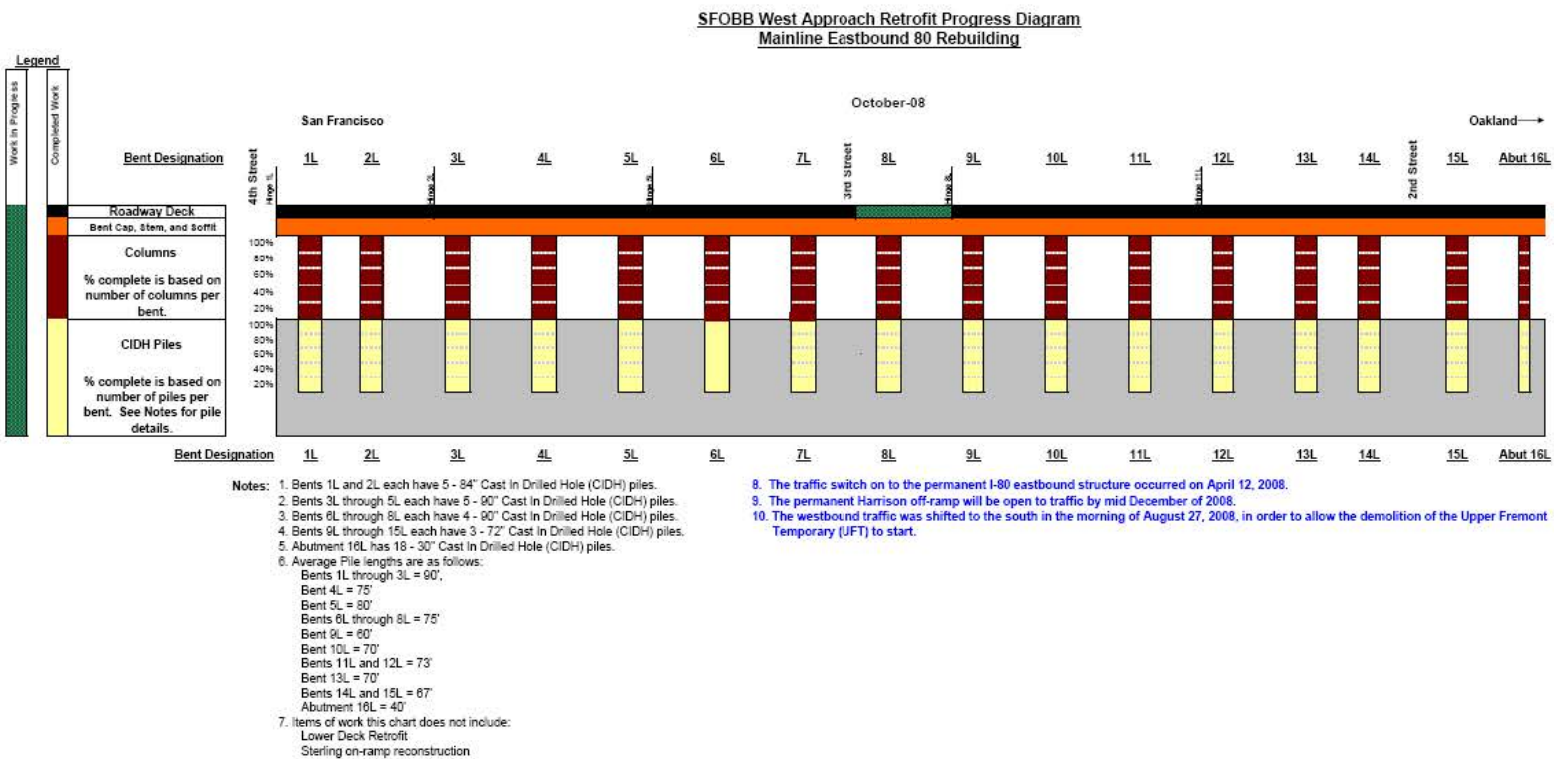
(Due to the rounding of numbers, the totals above are shown within \$0.1).

Appendix C.**CTC TBSRP Contributions
Adopted December 2005****Schedule of Contributions to the Toll Bridge Seismic Retrofit Program (\$ Millions)**

Source	Description	2005-06 (Actual)	2006-07 (Actual)	2007-08 (Actual)	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	Total
AB 1171	SHA	290									290
	PTA	80	40								120
	Highway Bridge Replacement and Rehabilitation (HBRR)	100	100	100	42						342
	Contingency				1	99	100	100	148		448
AB 144	SHA*	2	8				53	50	17		130
	Motor Vehicle Account (MVA)	75									75
	Spillover		125								125
	SHA**									300	300
	Total	547	273	100	43	99	153	150	165	300	1830

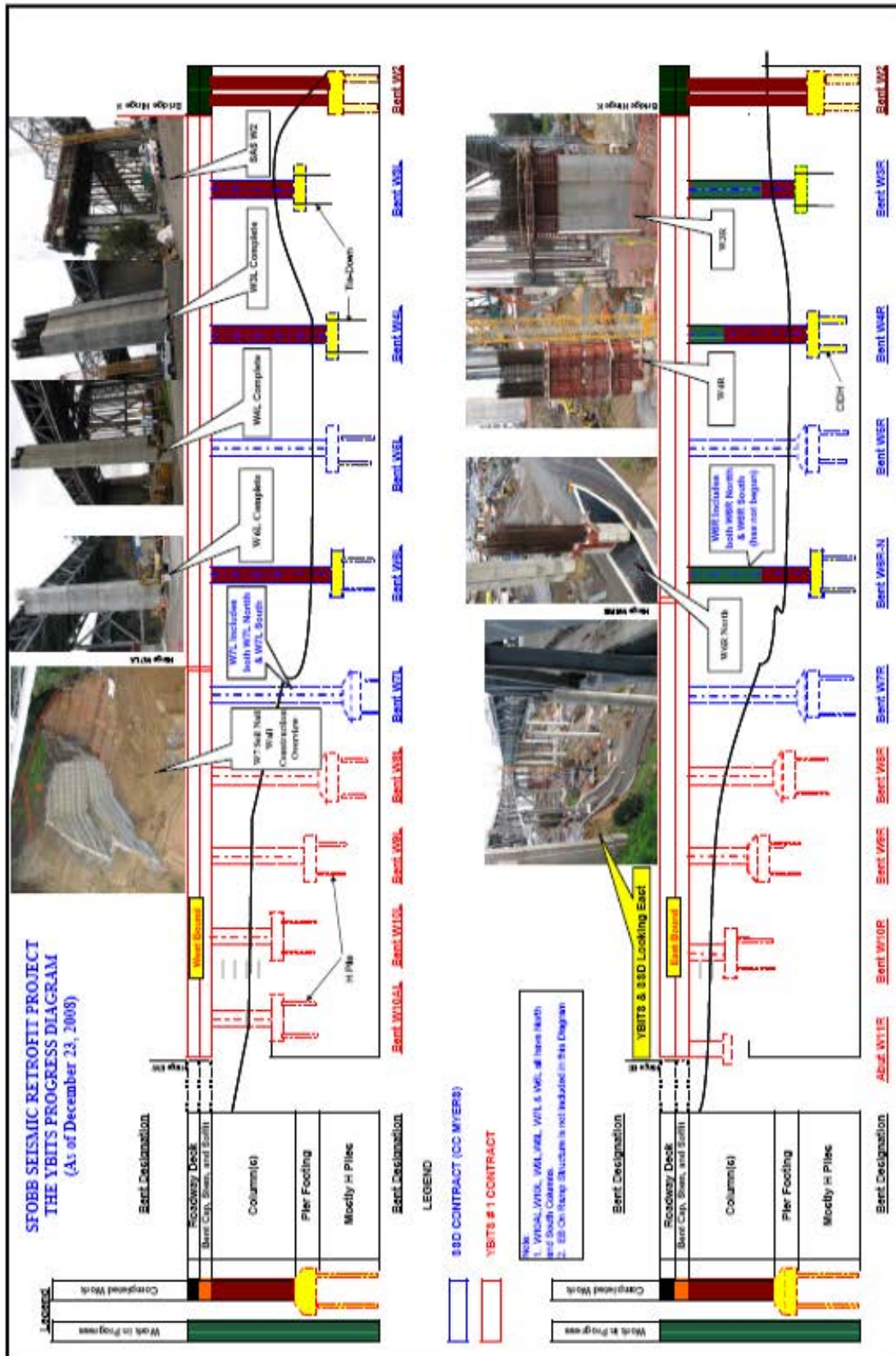
* Caltrans Efficiency Savings

** SFOBB East Span Demolition Cost

Appendix D.**SFOBB West Approach Retrofit Progress Diagram/Mainline Eastbound 80 Rebuilding**

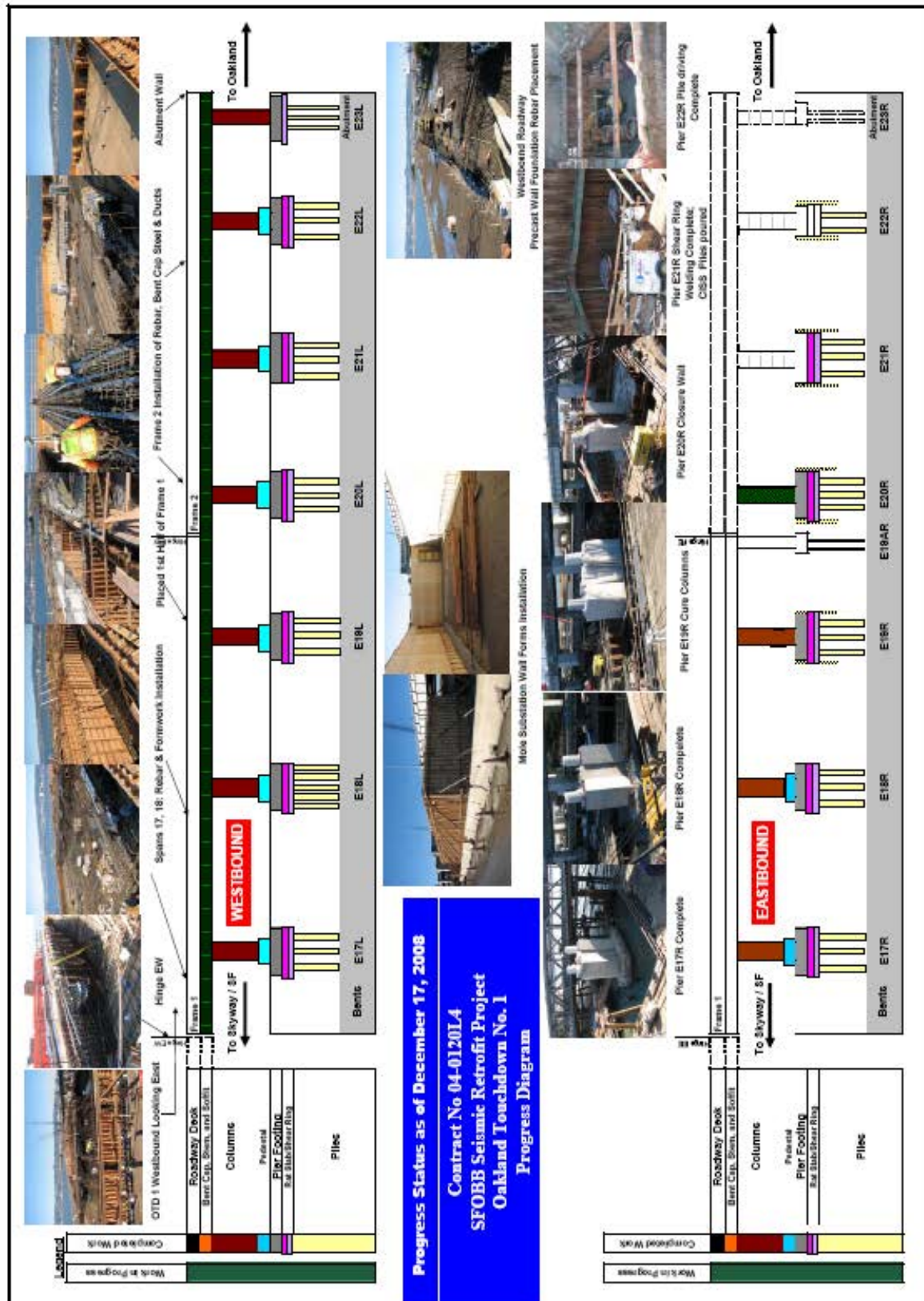
Appendix E.

SFOBB Seismic Retrofit Project YBITS Progress Diagram



Appendix F.

SFOBB Seismic Retrofit Project Oakland Touchdown #1



Appendix G. Project/Contract Photographs/Diagrams

SFOBB East Span Replacement Project



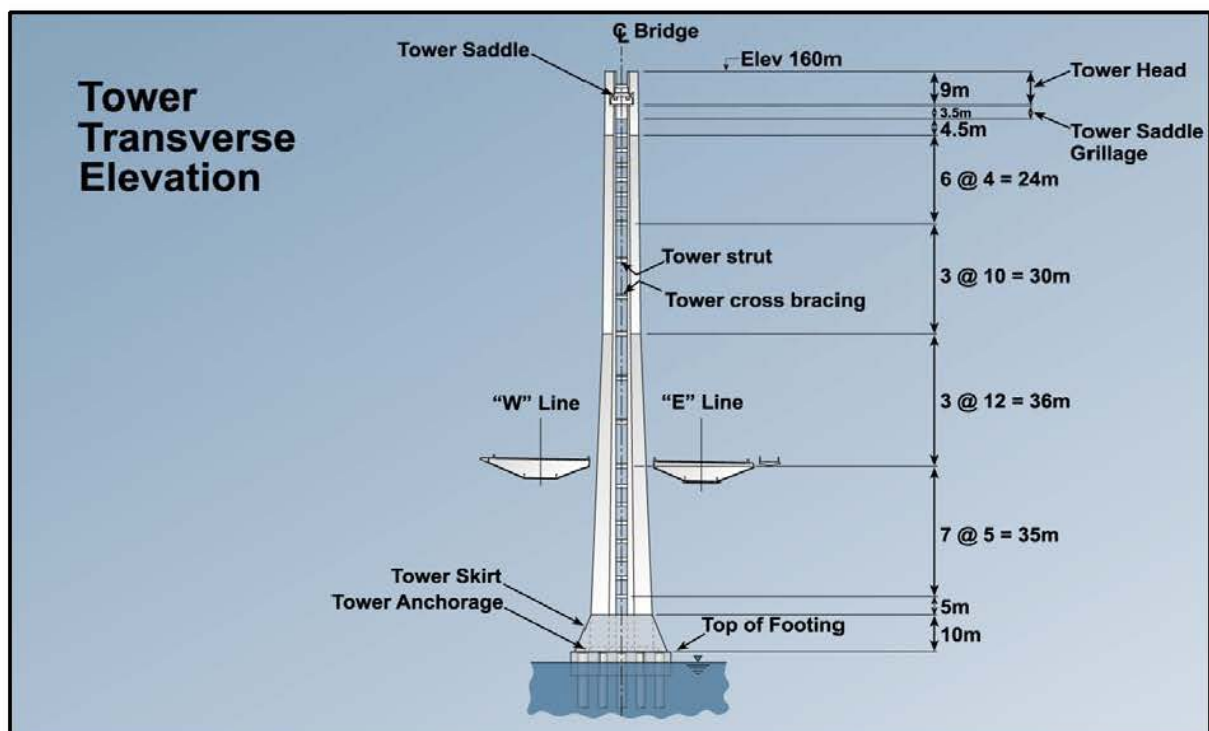
YBI Detour



YBITS on the Left and YBID on the Right

Appendix G. Project/Contract Photographs/Diagrams(cont.)

SAS Superstructure Contract



Appendix G. Project/Contract Photographs/Diagrams (cont.)

SAS Contract Photographs from Changxing Island, China SAS Superstructure Contract



SAS -Temporary Tower Truss Fabrication at ZPMC



SAS - Lift Shaft Fabrication

Appendix G. Project/Contract Photographs/Diagrams (cont.)

SAS Superstructure Contract (Cont'd.)



OBG (Orthotropic Box Girder) and Temporary Work



Lift 1 South Shaft

Welding Doublers Plates onto Lift 1 North Shaft Skin A



Exterior Stiffener Welding



Diaphragm to Skin Plate Welding and Fit-Lug Welding



Double Diaphragm Outline Beveled after Machine Milling

Appendix G. Project/Contract Photographs/Diagrams (cont.)

SAS E2/T1 Foundations Contract



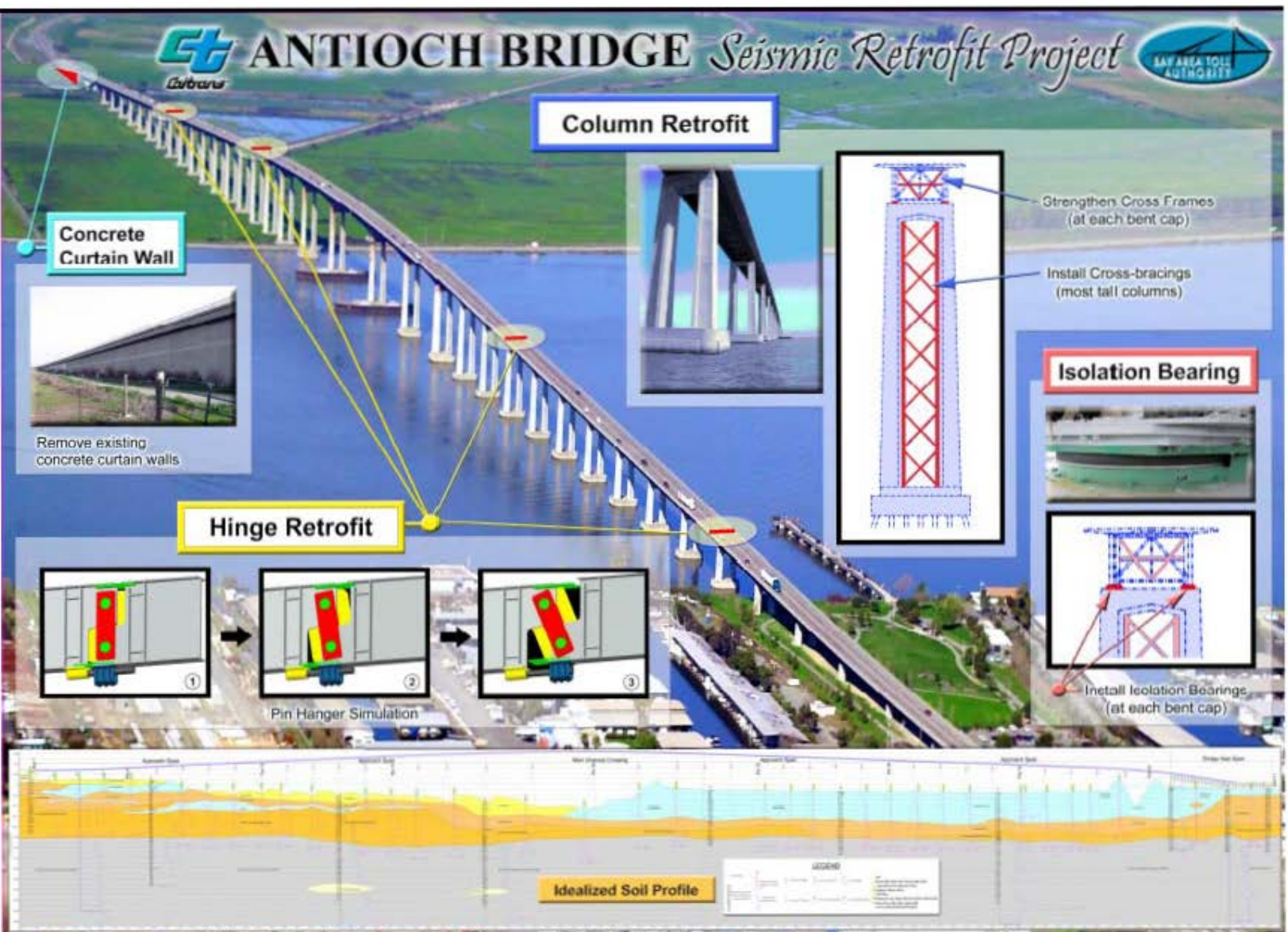
*T1 = Foundation for the 530-foot steel tower
E2 = Eastern Support of the suspension roadway
W2 = Western Support of the suspension roadway*



SAS – E2 Crossbeam Temporary Work

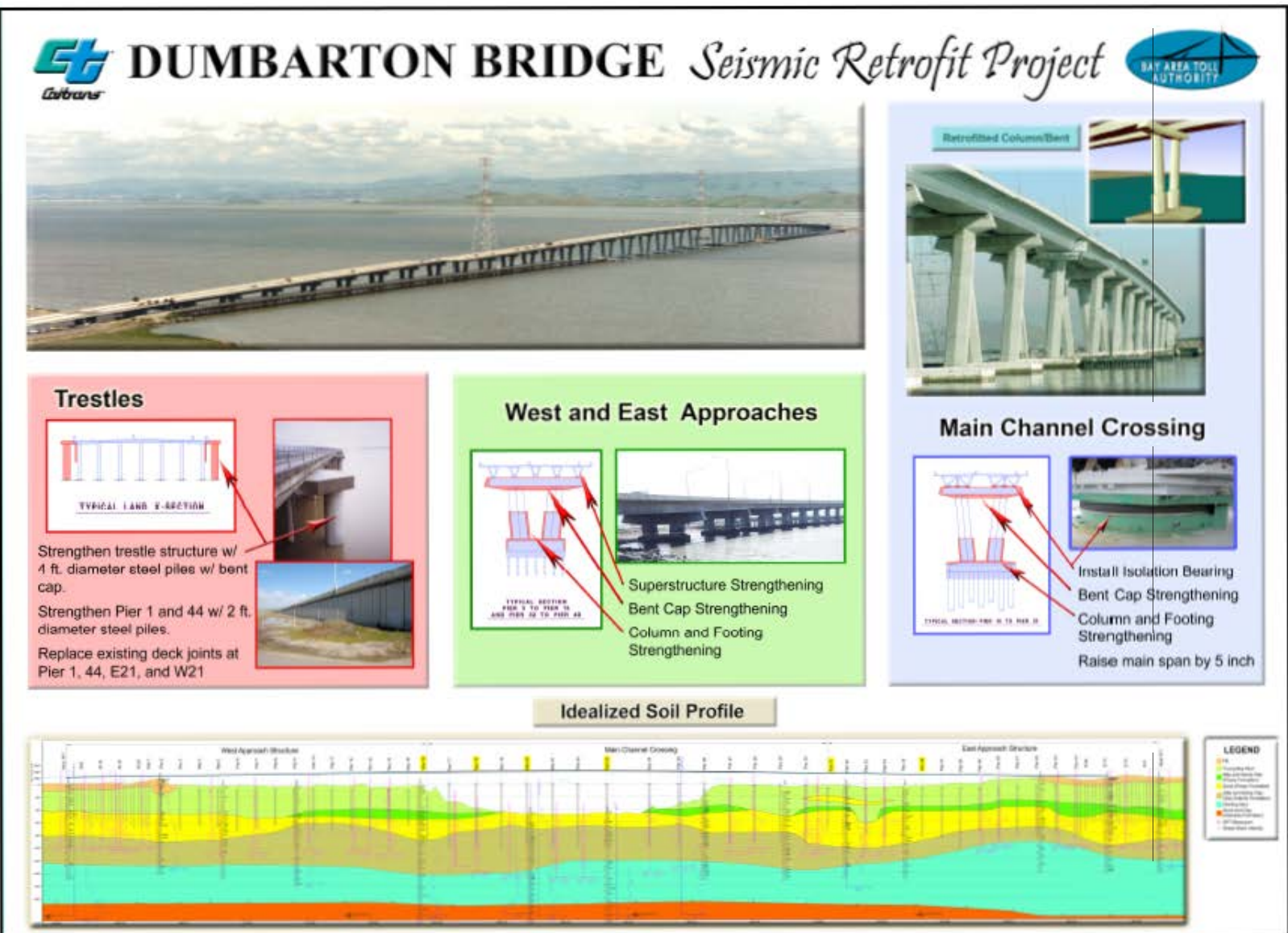
Appendix G. Project/Contract Photographs/Diagrams

Antioch Bridge Seismic Retrofit Project



Appendix G. Project/Contract Photographs/Diagrams (cont.)

Dumbarton Bridge Seismic Retrofit Project



Appendix G. Project/Contract Photographs (cont.)

Aerial View of East Span Projects



ET1 Skid Bent System Erection



YBITS and YBID Overview

Appendix G. Project/Contract Photographs (cont.)

SFOBB West Approach Replacement Project



First Street Retaining Wall



First Essex Bus On Ramps



Sterling On Ramp



I-80 Eastbound



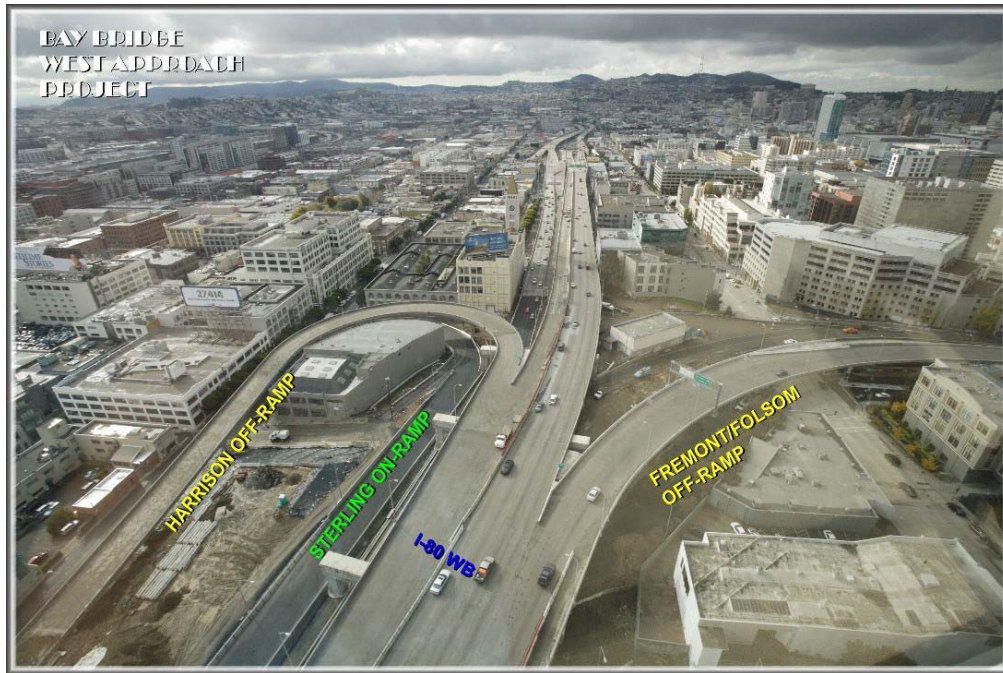
Harrison Street off Ramp and Sterling On Ramp



Infill Wall and Shear Walls under I-80 Eastbound

Appendix G. Project/Contract Photographs/Diagrams (cont.)

SFOBB West Approach Replacement Project (cont.)



West Approach Replacement Project



West Approach Replacement Project

ITEM 4: PROGRAM ISSUES

- a. TBSRP Capital Outlay Support (COS) Update

TO: Toll Bridge Program Oversight Committee (TBPOC) **DATE:** January 26, 2009

FR: Ali Banani, COS Project Control Manager, Caltrans,
Peter Lee, Senior Program Coordinator, BATA

RE: Agenda No. - 4a
Program Issues
Item- TBSRP Capital Outlay Support (COS) Update

Recommendation:

For Information Only / Staff will continue to report to the TBPOC quarterly on COS.

Cost Impacts:

NA

Schedule Impacts:

NA

Discussion:

For FY 2008-09, the TBPOC budgeted \$131.6 million for COS with a \$117.4 million COS target and \$14.2 million contingency. Through 2nd quarter of FY 2008-09, the Department has expended \$64.2 million or 55% of the \$117.4 million target.

Table 1 – FY 2008/09 COS Expenditures to Date Compared to Budget

COS Expense	Expended/ Committed Through September 2009	TBPOC COS Budget Target	% Expended
State Staffing	\$26.2 M	\$54.1 M	48%
A/E Staffing	\$38.0 M	\$63.3 M	60%
Total TBPOC COS Target	\$64.2 M	\$117.4 M	55%
Contingency		\$14.2 M	
Total COS Budget		\$131.6 M	

At the same time as State staffing expenses are trending below target, A/E consultant staffing expenses are trending above target and were further increased by \$3.2 million in unanticipated prior year expenditures billed to the current fiscal year as reported to the TBPOC in November 2008. While the Department is attempting to manage the expenditures, there are significant capital construction cost risks that continue to put cost pressure on the COS budget, including design work on the east tie-in for YBID and on-going design support work on the SAS. At current expenditure rates and without including any cost for design insurance discussions, the Department is forecasting

FY 2008/09 COS expenditures to be \$127.0 million, which while above the target COS budget, is still below the total COS budgeted for the year.

Table 2 – FY 2008/09 COS Forecast to Budget

FY 2008/09 COS Forecast	\$127.0 M
% of Forecast to \$117.4 M COS Target	+8%
% of Forecast to \$131.6 M COS Budget	-3%

In general, the Department expects COS expenditures to peak this fiscal year as the east tie-in is completed and segments of the SAS begin to arrive in the Bay Area.

In the long term, the COS Risk Assessment continues to project significant COS cost risks that are driven in large part by scope and schedule decisions that have already been made by the TBPOC and overall project schedule risks. In order-of-magnitude terms, it costs approximately \$50 M in COS for each additional SAS construction year.

Based on the 3rd Quarter 2008 Risk Assessment, the total COS risks are as follows:

Table 3 – 3rd Quarter 2008 COS Risk Assessment

Opportunity Schedule	\$98 M
Approved Contract Schedule	\$142 M
7~14 Month Delay Schedule	\$202 M

At this time, aside from the impacts from changes to the program schedule, staff believes that COS costs risks are well quantified. While staff will continue to manage and maximize staffing efficiencies, without dramatic staffing reductions to the program, such as curtailing design support during construction of the SAS, inspection, public outreach, documentation, and/or Gateway Park planning, it is unlikely that COS cost risks can be meaningfully reduced much less than the \$98 million, assuming that the opportunity schedule is achieved.

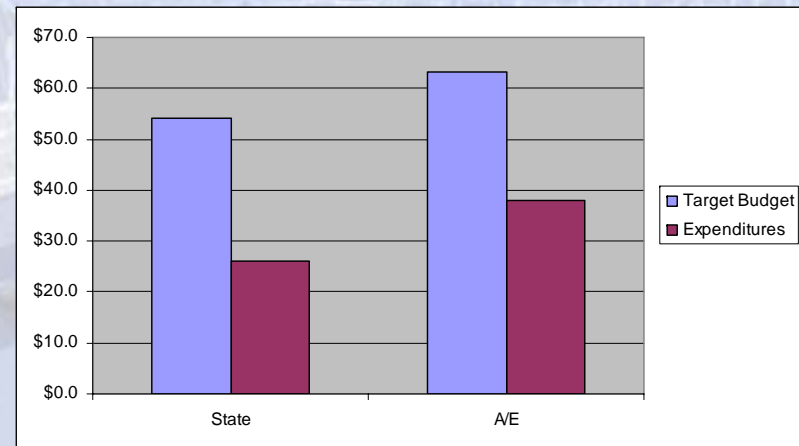
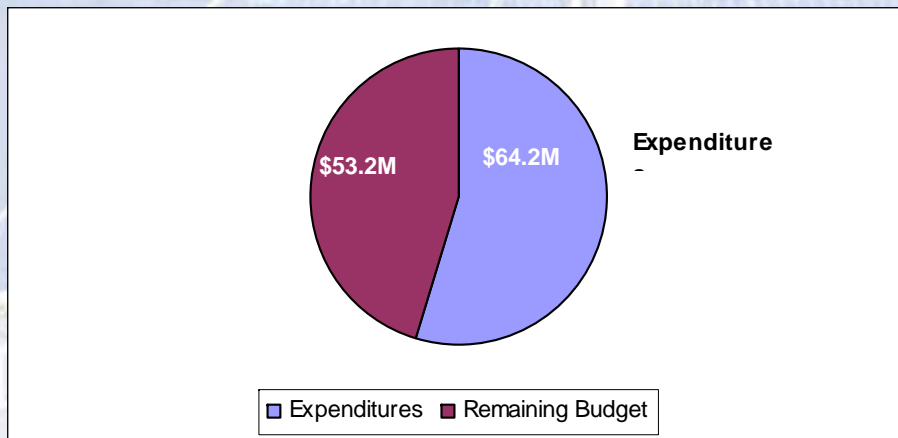
Attachment(s):

- 1) FY 08-09 Expenditure Analysis
- 2) FY 08-09 Expenditure Analysis (Resource Usage through December 2008)
- 2) FY 08-09 Expenditure Forecast
- 3) COS Budget Status

FY 08-09 Expenditure Analysis

As of December 31, 2008

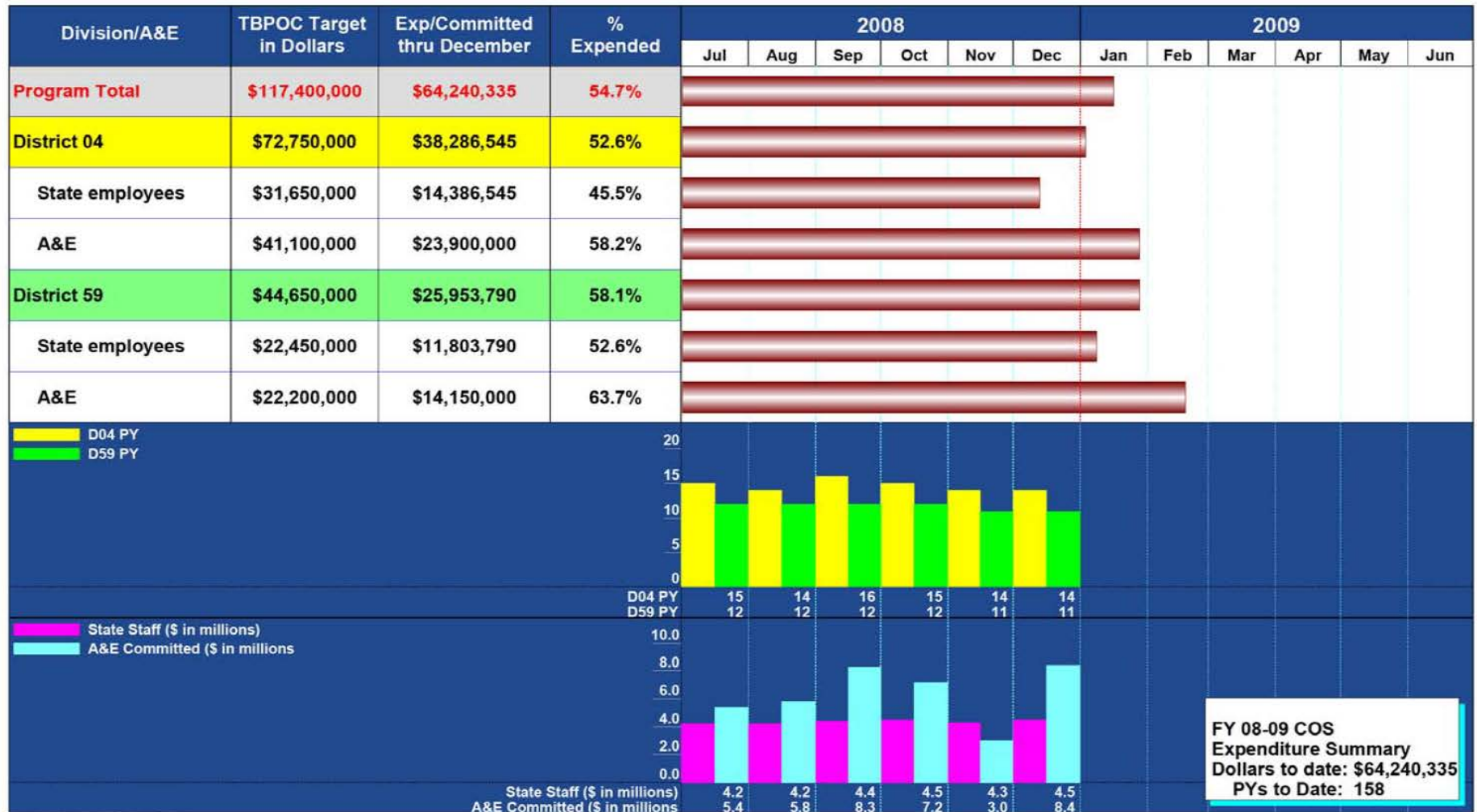
	<u>Total</u>	<u>State</u>	<u>A/E</u>
Target Budget Expenditures	\$117.4M <u>\$ 64.2M</u>	\$54.1M <u>\$26.2M</u>	\$63.3M <u>\$38.0M</u>
Remaining Budget Contingency	\$53.2M \$14.2M	\$27.9M	\$25.3M



FY 08-09 Expenditure Analysis

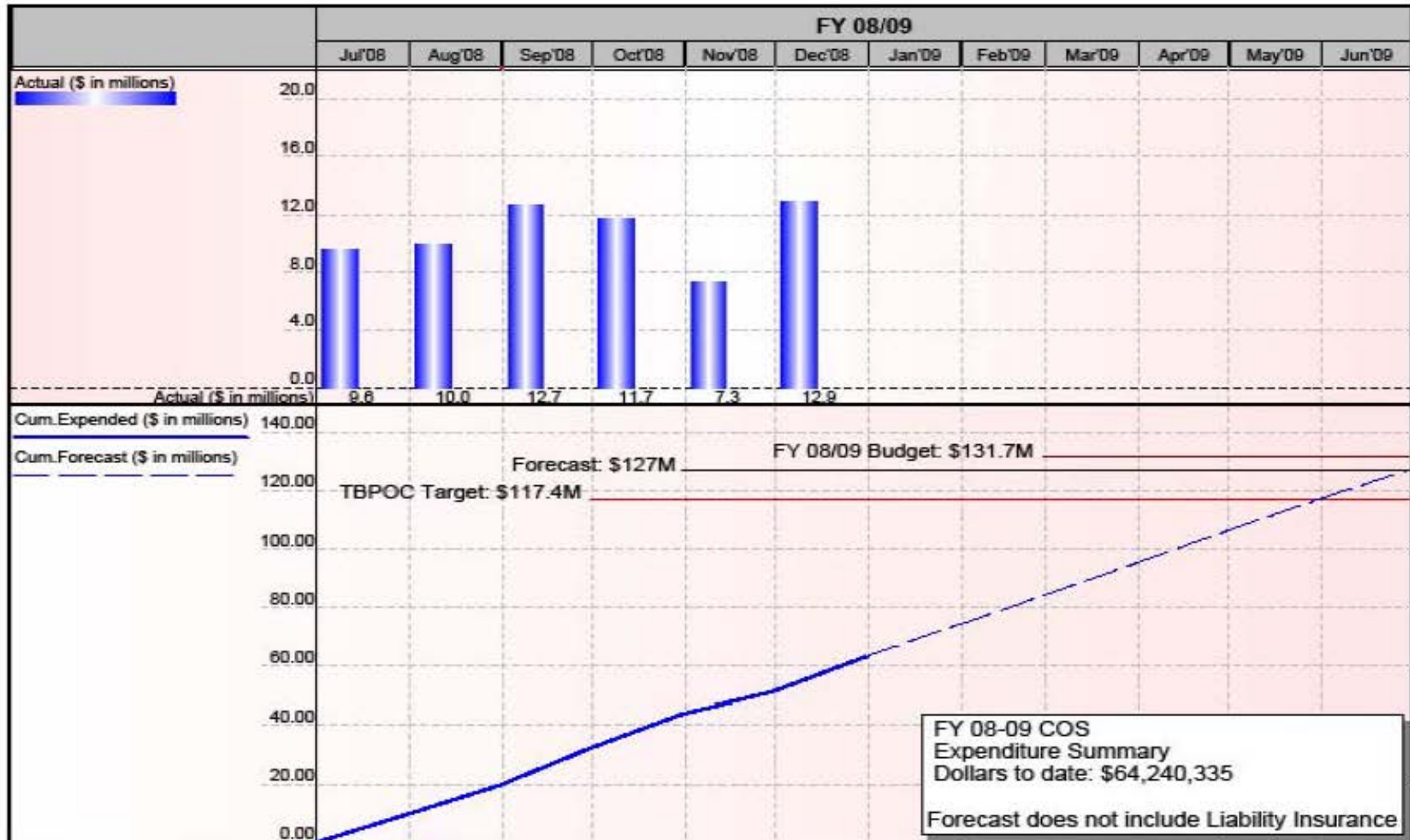
TOLL BRIDGE SEISMIC RETROFIT PROGRAM

FY 08-09 Resource Usage through December 2008



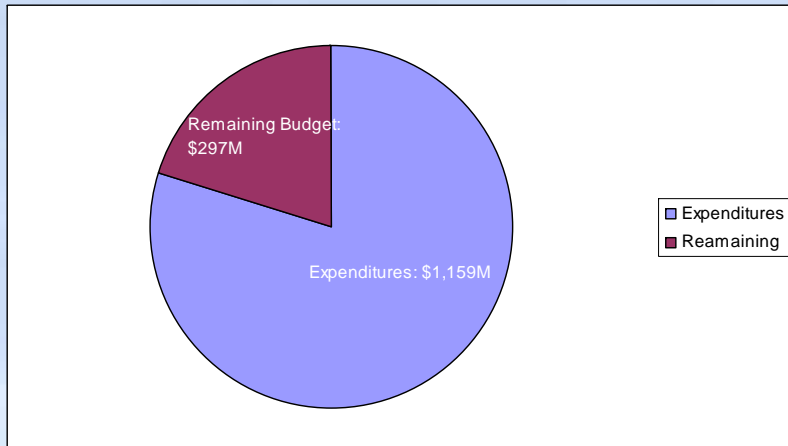
FY 08-09 Expenditure Forecast

Toll Bridge Seismic Retrofit Program FY 08/09 Expenditure Forecast



COS Budget Status

As Of December 31, 2008

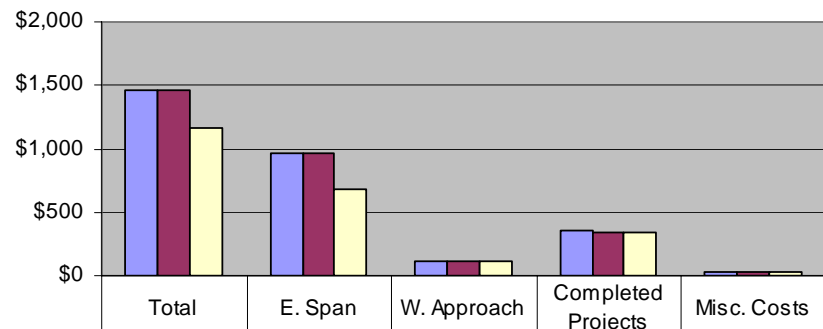


AB 144 Budget: \$1,463 M

Current Budget: \$1,456 M

Expenditures: \$1,159 M

Remaining Budget: \$ 297 M



AB 144 Budget (\$M)	\$1,463	\$959	\$120	\$354	\$30
Current Budget (\$M)	\$1,456	\$959	\$120	\$347	\$30
Expenditures Thru Dec 31, 2008 (\$M)	\$1,159	\$675	\$113	\$346	\$25

ITEM 4: PROGRAM ISSUES

- b. 2009 Legislative Update Draft Report

Memorandum

TO: Toll Bridge Program Oversight Committee (TBPOC) **DATE:** January 26, 2009

FR: Bart Ney, Public Information Officer, Caltrans

RE: Agenda No. - 4b

Item- Program Issues

2009 Legislative Update Draft Report

Recommendation:

For Information Only

Cost:

N/A

Schedule Impacts:

N/A

Discussion:

The 2009 Legislative Update draft report is the third annual update highlighting progress on the San Francisco-Oakland Bay Bridge Seismic Retrofit Projects. Members of your staff have already reviewed this draft; most recently, the PMT reviewed drafts on January 5 and 26. Your review is requested before the update is presented to the Legislature in March 2009. Any feedback is appreciated no later than Monday, Feb. 18 in order to make any necessary changes and begin printing.

Attachment(s):

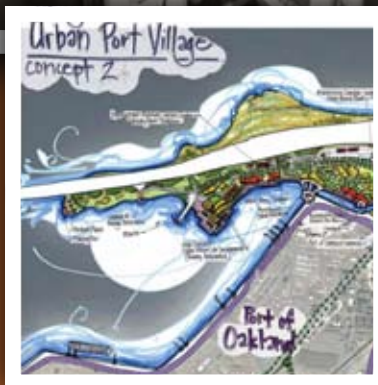
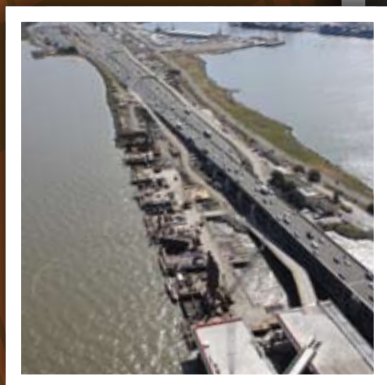
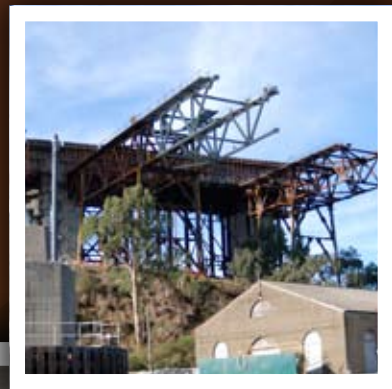
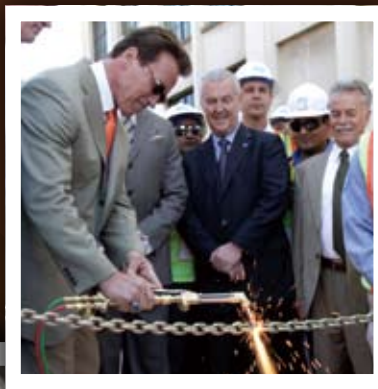
2009 Legislative Update Draft Report



TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION

2009 Legislative Update



2009 Legislative Update

Prepared by the



**TOLL BRIDGE PROGRAM
OVERSIGHT COMMITTEE**

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION



ACKNOWLEDGEMENTS

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Bay Area Toll Authority (BATA)

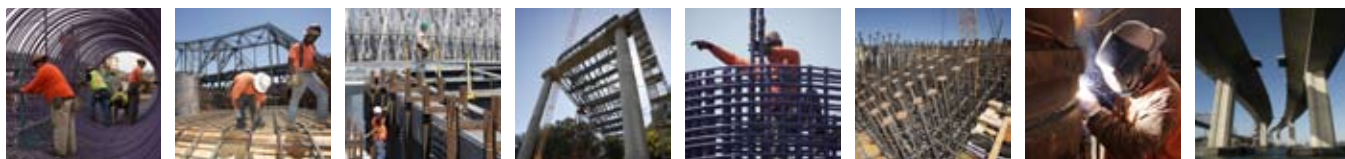
Peter Lee
Senior Program Coordinator

Jason Weinstein
Senior Program Coordinator

California Transportation Commission (CTC)

Dina Noel
Assistant Deputy Director

Putting finishing touches on the West Approach



2009 Legislative Update

TABLE OF CONTENTS

Executive Summary	4
Toll Bridge Program Update	6
San Francisco-Oakland Bay Bridge	9
West Approach Attracts Star Power	11
East Span Continues to Take Shape	13
Self-Anchored Suspension Bridge	14
Yerba Buena Island Transition Structure & Temporary Detour	21
Skyway.....	23
Oakland Touchdown.....	24
Risk Management.....	25
Protecting the Environment	26
Gateway Park	27
Outreach/Communications.....	29
Benicia-Martinez Bridge	33
Dumbarton and Antioch Bridges	34
2009 Look Ahead	36
Appendix A	37



Executive Summary



The graceful curve of the completed Skyway reaching towards the East Bay

2008 YEAR IN REVIEW

WINTER

The Self-Anchored Suspension Span's two marine foundations—T1 and E2—were completed

Skyway contract accepted

*Concrete pours for cap beam of SAS foundation
W2 begin*



SPRING

West Approach opens permanent eastbound structure opens to traffic

Educational Outreach Subcommittee created

*Began fabrication of double-deck steel truss for
East Tie-In of Temporary Detour*



SUMMER

Visioning session for Gateway Park included TBPOC and Oakland Mayor Ron Dellums

Yerba Buena Island Transition Structure #1 Contract advertised

West Tie-In Phase II foundations completed on YBI Detour



FALL

All permanent piles for Oakland Touchdown driven

Adobe Systems names BayBridge360 "Site of the Day."

All steel for Temporary Detour viaduct erected





Aerial views of work on the Temporary Detour on Yerba Buena Island in early 2008 (top) and late 2008 (bottom)



TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION

2009 LEGISLATIVE UPDATE EXECUTIVE SUMMARY

To Members of the California Legislature:

With another busy year behind us, the Toll Bridge Program Oversight Committee (TBPOC) is pleased to present the 2009 Legislative Update. This third annual update highlights the significant strides and achievements made in 2008, as well as looks at the remarkable year ahead. While the scope and scale of work in 2009 is astonishing, we will undertake these construction and engineering feats with the same dedication and focus that have guided our efforts so successfully to date.

In 2008, we focused on setting the stage for what will be our busiest year yet in 2009. That is not to say 2008 did not have its own milestones, including the opening of the West Approach's permanent eastbound roadway, the completion of the Skyway and the Self-Anchored Suspension Span's major marine foundations, completing all work on permanent piles in the Bay, and ongoing steel fabrication throughout the year.

2008 HIGHLIGHTS

SAN FRANCISCO-OAKLAND BAY BRIDGE

WEST APPROACH

The removal and replacement of the 1-mile stretch of freeway connecting San Francisco to the San Francisco-Oakland Bay Bridge was close to completion in 2008.

- The **opening of the permanent eastbound lanes** in April represented the final major traffic shift, from a temporary structure to a permanent one. Gov. Arnold Schwarzenegger, San Francisco Mayor Gavin Newsom and Oakland Mayor Ron Dellums were among the dignitaries who praised this milestone at a community celebration.
- **Other highlights** included the demolition of the temporary eastbound roadway, the opening of the Sterling Street on-ramp, and receiving seismic safety certification.



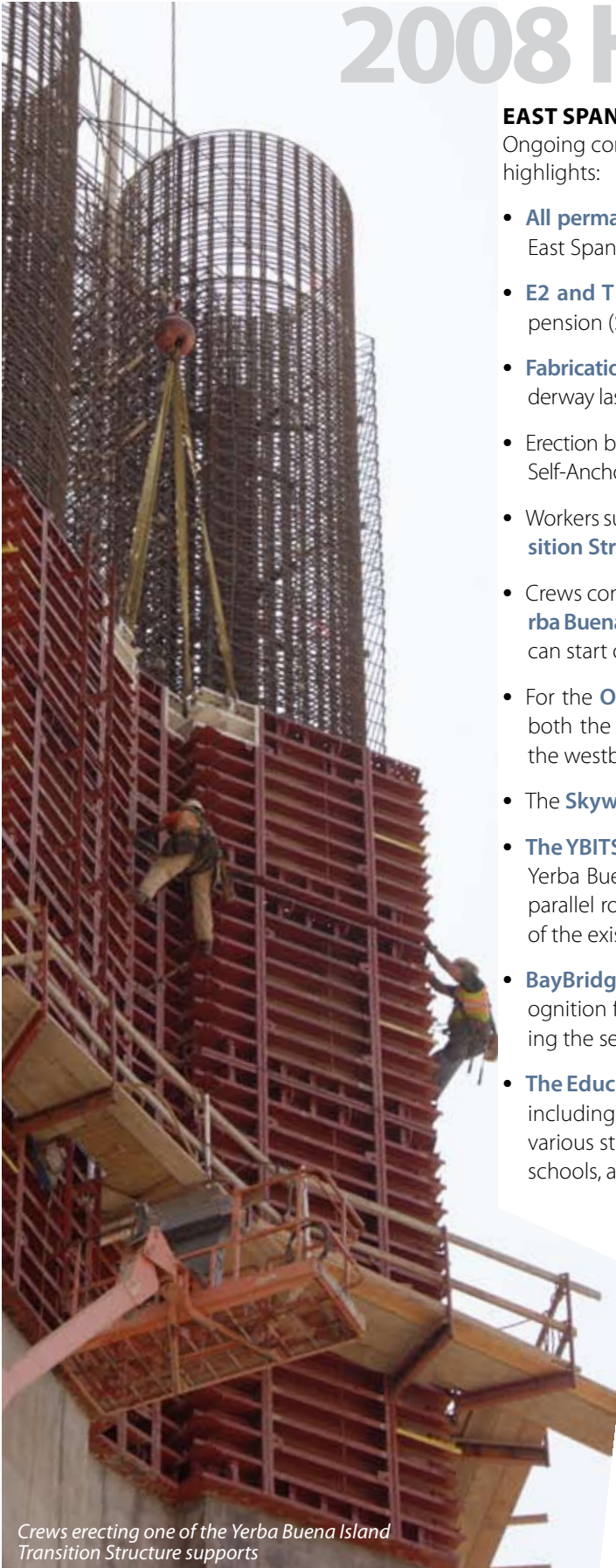
Gov. Schwarzenegger cuts a chain symbolizing the opening of the West Approach

2008 HIGHLIGHTS

EAST SPAN

Ongoing construction of the new East Span included the following highlights:

- **All permanent in-water pile driving was completed** in 2008 on the East Span.
- **E2 and T1**—the two marine foundations for the Self-Anchored Suspension (SAS) span—were completed in January 2008.
- **Fabrication of the SAS roadway deck and tower sections** was fully underway last year, and the first sections are to arrive from China in 2009.
- Erection began on the **temporary structures** necessary to support the Self-Anchored Suspension span during construction.
- Workers substantially completed three of the **Yerba Buena Island Transition Structure's (YBITS)** 13 supports, with seven more in progress.
- Crews continued building the 900-foot-long **temporary detour on Yerba Buena Island**. Traffic will shift to the detour in 2009 so construction can start on the YBITS.
- For the **Oakland Touchdown**, crews built the support structures for both the westbound and eastbound roadways. Work also began on the westbound roadway.
- The **Skyway** was completed in early 2008.
- **The YBITS #1 Contract documents** were finalized and advertised. The Yerba Buena Island Transition Structure will transition traffic from the parallel roadways of the new East Span to the upper and lower decks of the existing Yerba Buena Island Tunnel.
- **BayBridge360**, a new section of *BayBridgeInfo.org*, won industry recognition for providing viewers with dynamic visual content showcasing the seismic retrofit projects.
- **The Educational Outreach Program** began numerous efforts in 2008, including the formation of a dedicated outreach team representing various stakeholders, launching a pilot education program in Oakland schools, and pursuing a partnership with the Lawrence Hall of Science at the University of California at Berkeley.
- **The Small Business Program** focused on developing a curriculum for future training and education initiatives, as well as hosting a bidder's conference for small businesses interested in working on YBITS Contract #1.
- Visioning and planning sessions for **Gateway Park** involved numerous local, regional and statewide leaders, including Oakland Mayor Ron Dellums and the TBPOC.

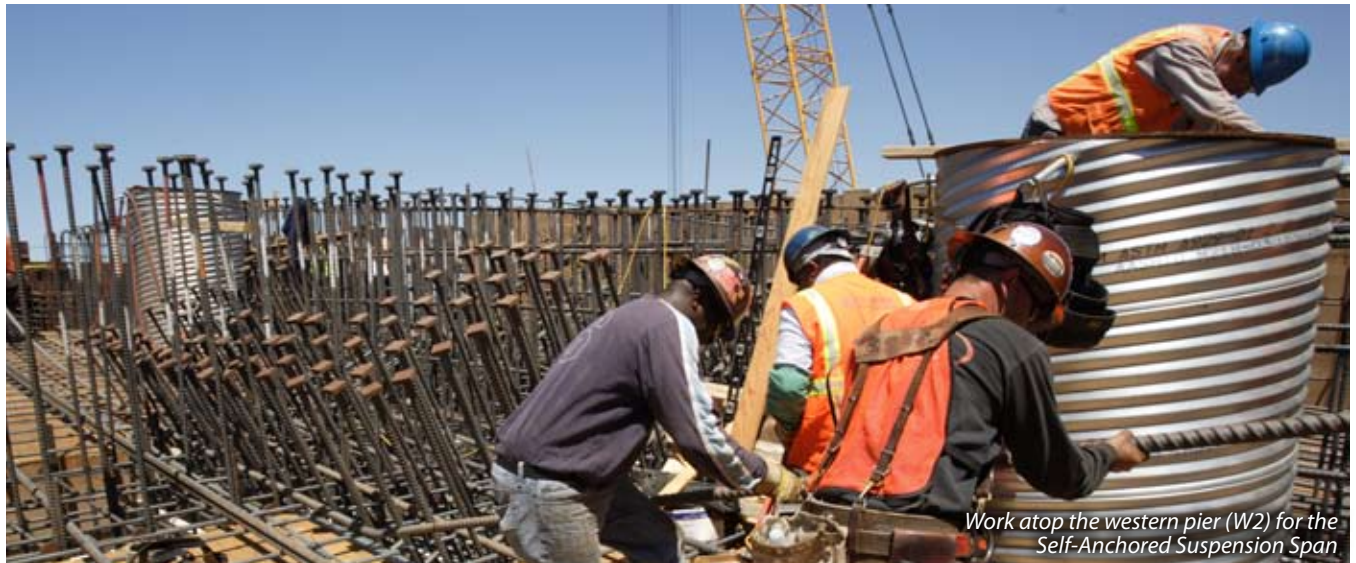


Crews erecting one of the Yerba Buena Island Transition Structure supports



TOLL BRIDGE PROGRAM
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Work atop the western pier (W2) for the Self-Anchored Suspension Span

2008 HIGHLIGHTS

OTHER BRIDGES

BENICIA-MARTINEZ BRIDGE

Crews began reconfiguring the original 1962 bridge to carry four lanes of southbound traffic, along with a new bicycle/pedestrian path.

DUMBARTON & ANTIOCH BRIDGES

A new seismic study reveals an urgent need to retrofit both the Antioch and Dumbarton bridges. The combined cost of retrofitting the bridges is estimated to be \$950 million.

LOOKING AHEAD TO 2009

We will celebrate numerous milestones on the Bay Bridge in 2009. Early in the year, the West Approach will be completed as the Harrison Street off-ramp reopens and the final westbound and eastbound roadway alignments open to traffic. Crews will also close the entire Bay Bridge for the first time since 2007 in order to shift traffic onto the temporary detour at Yerba Buena Island so construction of the Yerba Buena Island Transition Structure's main-line can begin. For the Self-Anchored Suspension Span, the first steel shipments from China will arrive, as will the crane barge that will lift the SAS steel segments into place. Construction of the Oakland Touchdown's westbound structure will finish so the SAS contractor can use the structure to access the Skyway, in order to work on the eastern end of the SAS.

Work on other bridges will continue as well. The reconfiguration of the original Benicia-Martinez Bridge to carry four lanes of southbound traffic, along with shoulders and a pedestrian/bicycle path, is expected to be completed in 2009, several months ahead of schedule.

On the Antioch and Dumbarton bridges, design and construction plans and cost estimates, are expected to be ready in late summer. Final regulatory agency permits are expected to be obtained in the fall.

We are looking forward to continuing our progress with all of the programs under the Toll Bridge Program in the year ahead, while we endeavor to keep you and your constituents informed of our work through many new and exciting channels.

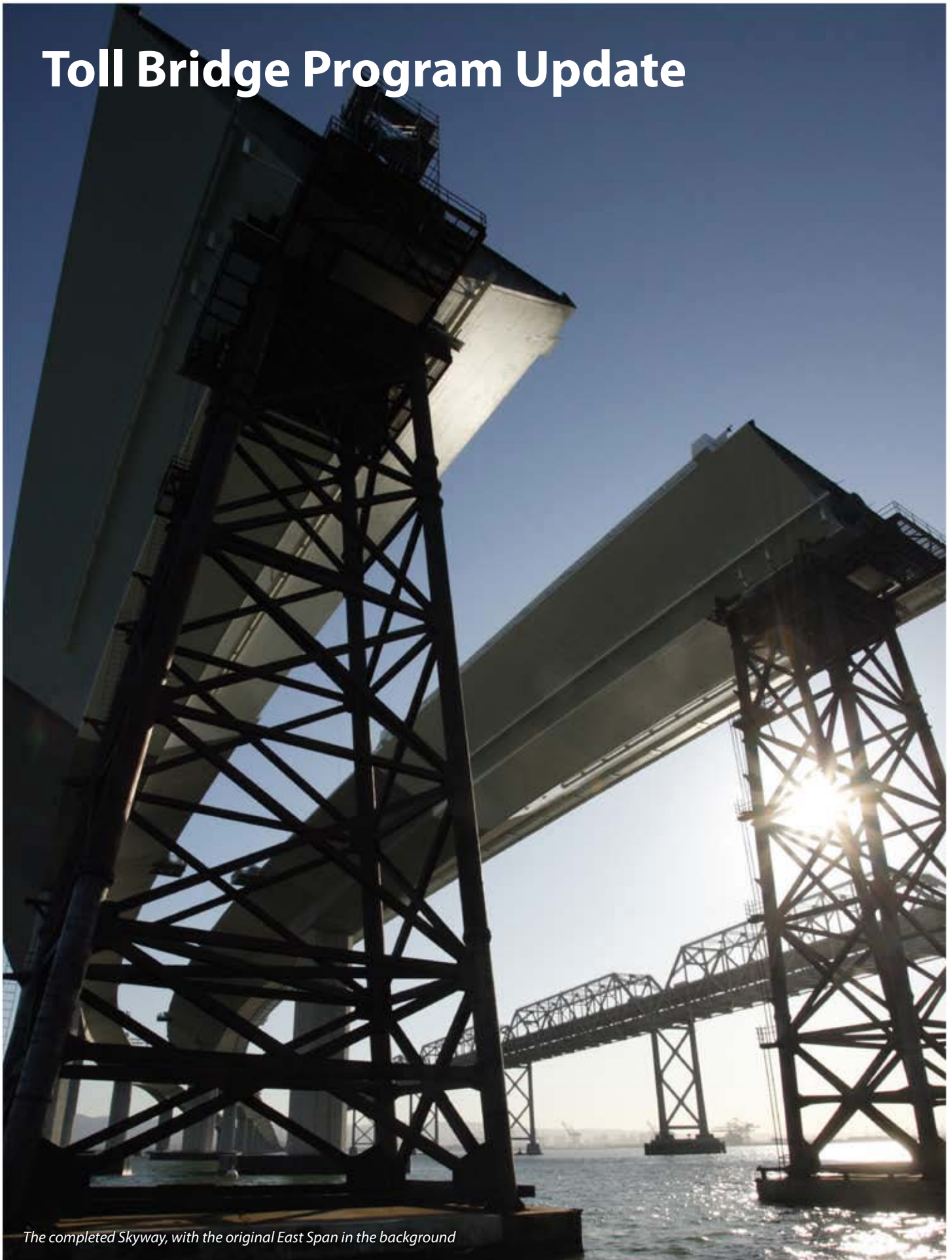
Thank you for your continued support.

Will Kempton, Chair
Director
California Department of Transportation

Steve Heminger
Executive Director
Bay Area Toll Authority

John F. Barna, Jr.
Executive Director
California Transportation Commission

Toll Bridge Program Update



The completed Skyway, with the original East Span in the background

TOLL BRIDGE PROGRAM UPDATE

Several events—both momentous and challenging—have brought us to this point, where we can see the silhouette of the new East Span take shape. As we have traveled to this point, we have never forgotten the lessons of Loma Prieta, or that the clock is always ticking.

This progress would not be possible without the support of the public through the passage of Regional Measure 1 (RM1), which authorized an increase in bridge tolls, or the vision of the State Legislature with Senate Bills (SB) 60 and 226. Those bills established the Toll Bridge Seismic Retrofit Program in 1997 and provided funding for critical seismic retrofit work on state-owned toll bridges. Assembly Bill (AB) 144 created the Toll Bridge Program Oversight Committee (TBPOC), which is composed of the director of the California Department of Transportation (Caltrans), and the executive directors of the Bay Area Toll Authority (BATA) and the California Transportation Commission (CTC). The legislation charged these directors with joint oversight and control of the program.

Program Budget and Schedule

In addition to establishing the TBPOC, AB 144 consolidated all toll revenue collection on the seven state-owned Bay Area toll bridges, and placed financing of the Toll Bridge Program under the jurisdiction of BATA. The entire \$8.7 billion AB 144/SB 60 baseline budget for the program is being funded under a BATA-approved finance plan that is in turn funded from a combination of tolls with state and federal transportation funding. (Appendix A, Tables 1 and 2).



The retrofitted eastbound lanes of the West Approach is just inches from buildings, such as the Clock Tower building

STATUS OF TOLL BRIDGE PROGRAM PROJECTS

San Francisco-Oakland Bay Bridge East Span Replacement

Under Construction

San Francisco-Oakland Bay Bridge West Approach Replacement

Under Construction

San Francisco-Oakland Bay Bridge West Span Seismic Retrofit

COMPLETED

San Francisco-Oakland Bay Bridge Yerba Buena Island Tunnel

COMPLETED

San Mateo-Hayward Bridge Seismic Retrofit

COMPLETED

Richmond-San Rafael Bridge Seismic Retrofit

COMPLETED

Eastbound Carquinez Bridge Seismic Retrofit

COMPLETED

Benicia-Martinez Bridge Seismic Retrofit

COMPLETED

New Benicia-Martinez Bridge (Regional Measure 1)

COMPLETED

San Diego-Coronado Bridge Seismic Retrofit

COMPLETED

Vincent Thomas Bridge Seismic Retrofit

COMPLETED

San Francisco-Oakland Bay Bridge



Work on Yerba Buena Island



TOLL BRIDGE PROGRAM
OVERSIGHT COMMITTEE

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YBI Temporary detour under construction

THE SAN FRANCISCO-OAKLAND BAY BRIDGE: BUILDING A FOUNDATION FOR THE FUTURE!

The series of mind-boggling construction and engineering feats to retrofit and replace the entire 8-mile San Francisco-Oakland Bay Bridge represents the largest—and most challenging—public works effort in California history. This monumental undertaking requires a massive mobilization of resources and resolve. The determination of the vast workforce—from designers to construction crews—is unprecedented. It can be seen in every element of this endeavor, from such daunting tasks as building a 900-foot-long temporary detour on 100-foot-tall supports, to the smallest details, such as the Art Deco touches on the support columns of the West Approach.

Keeping the more than 280,000 vehicles flowing smoothly amidst this construction is a constant reminder of the herculean task before us. Yet we are up to the task. While this project has already made history, we look forward to the milestones that lie ahead.

The past year presented significant challenges. To resolve budget and schedule issues, the program tapped the contin-

gency fund established to handle such needs during construction. While construction delays occurred on the SAS during fabrication, our team identified the problem, analyzed possible solutions, and worked with the contractor to solve the problem and move production forward. The solution was reviewed and approved by some of the industry's best professionals.

Resolving such issues takes time. But it is critical to address problems when they arise and move through them as efficiently as possible in order to stay on schedule. This particular issue has not affected the final completion date of the Bay Bridge. We are currently working with the contractor to regain lost time in the contractor's schedule.

In 2008, our achievements traversed the entire Bay Bridge corridor. On the West Approach, crews completed the last major traffic switch as drivers moved onto the new permanent eastbound structure, and the last retrofitted on-ramp opened at year's end.

On of Yerba Buena Island (YBI), the tem-

2008: Laying the Foundation

COMPLETED

- Skyway
- SAS marine foundations (T1 & E2)

ONGOING

- West Approach
- Temporary supports for SAS
- Yerba Buena Island Transition Structure foundations
- Temporary Yerba Buena Island Detour
- Oakland Touchdown westbound structure and roadway
- Steel fabrication

porary detour continued to take shape. So did the Self-Anchored Suspension (SAS) Span, as the temporary supports began to rise from the bay and work finished on the two marine foundations.

The Skyway is complete, awaiting its connection to the SAS at one end, while workers toil on the Oakland Touchdown at the other end.

We also made progress on approval of shop drawings. By the end of 2008, shop drawings for the Temporary Detour's East Tie-In and the Yerba Buena Island Transition Structure were both 85 percent complete, and drawings for the SAS and Oakland Touchdown were both approximately 70 percent complete. Drawings for the Skyway, the Detour viaduct and SAS supports E2 and T1 are 100 percent complete.

These achievements have paved the way for the major milestones anticipated for 2009—moving the Bay Bridge ever closer from bold vision to grand reality.

2009 LEGISLATIVE UPDATE



Helping celebrate the opening of the West Approach were Oakland Mayor Ron Dellums, Gov. Arnold Schwarzenegger, San Francisco Mayor Gavin Newsom, Caltrans Director Will Kempton and Metropolitan Transportation Commission Chair Bill Dodd

WEST APPROACH ATTRACTS STAR POWER

On a picture-perfect spring day under clear and sunny skies, Gov. Arnold Schwarzenegger cut a gold chain strung across the West Approach to officially open the structure's new (and permanent) eastbound roadway. Joined by San Francisco Mayor Gavin Newsom and Oakland Mayor Ron Dellums, along with state transportation leaders, local dignitaries and other guests, Gov. Schwarzenegger presided over a festive community celebration in April, complete with a chain cutting ceremony and barbeque lunch. With the opening of the new eastbound approach to the Bay Bridge, drivers are once again enjoying those sunny skies, thanks to unobstructed views and a straight shot onto the bridge.

This was one of the final milestones of the "retrofit by replacement" of the West Approach, a 1-mile stretch of Interstate 80 connecting San Francisco to the Bay Bridge. The opening of this permanent structure carrying eastbound traffic is the final major traffic shift—from a temporary structure to a permanent one—for the West Approach. For more than a year, eastbound motorists have been diverted onto a winding temporary structure tucked beneath westbound traffic coming off the Bay Bridge.

Gov. Schwarzenegger characterized the Bay Bridge, and the latest milestone on the West Approach, as a powerful reminder that Californians always rise to a challenge.

Bordered by 5th Street and the Anchorage at Beale Street, the

West Approach has been undergoing seismic safety retrofit work that involves completely removing and replacing this stretch of highway, as well as six on and off-ramps since 2002. Throughout the project, more than 280,000 vehicles a day have flowed in the midst of this critical and essential seismic construction.

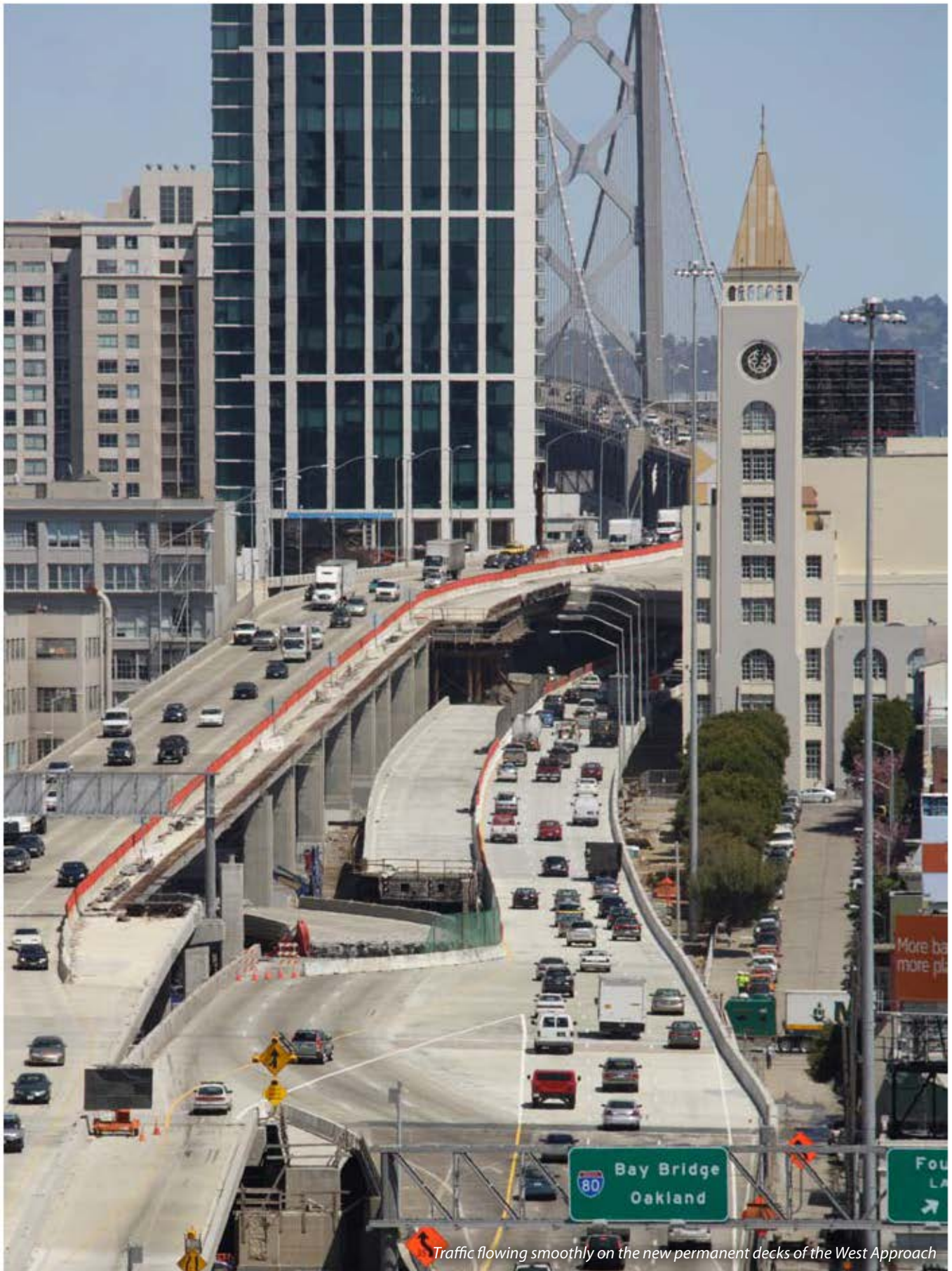
Prior to retrofitting, the West Approach had an upper and lower deck configuration from 3rd Street to the Anchorage, with one foundation system supporting both decks. Each deck now has an independent column and foundation support system, a crucial aspect of making them seismically sound. The roadways between 5th and 3rd streets, leading to the double-decks, are parallel concrete decks.

The shift to the permanent eastbound structure came almost one year after Caltrans moved traffic to the temporary eastbound structure, allowing crews to demolish the final 3,000-foot section of the original West Approach. The temporary eastbound structure ran beneath the westbound lanes, so the old eastbound lanes could be rebuilt. Crews demolished the original eastbound structure in just 17 days. At the end of 2008, the Sterling Street on-ramp reopened, and the project received seismic safety certification. In February 2009, the project will be complete as the Harrison Street off-ramp reopens and the final westbound and eastbound roadway alignments open to traffic.



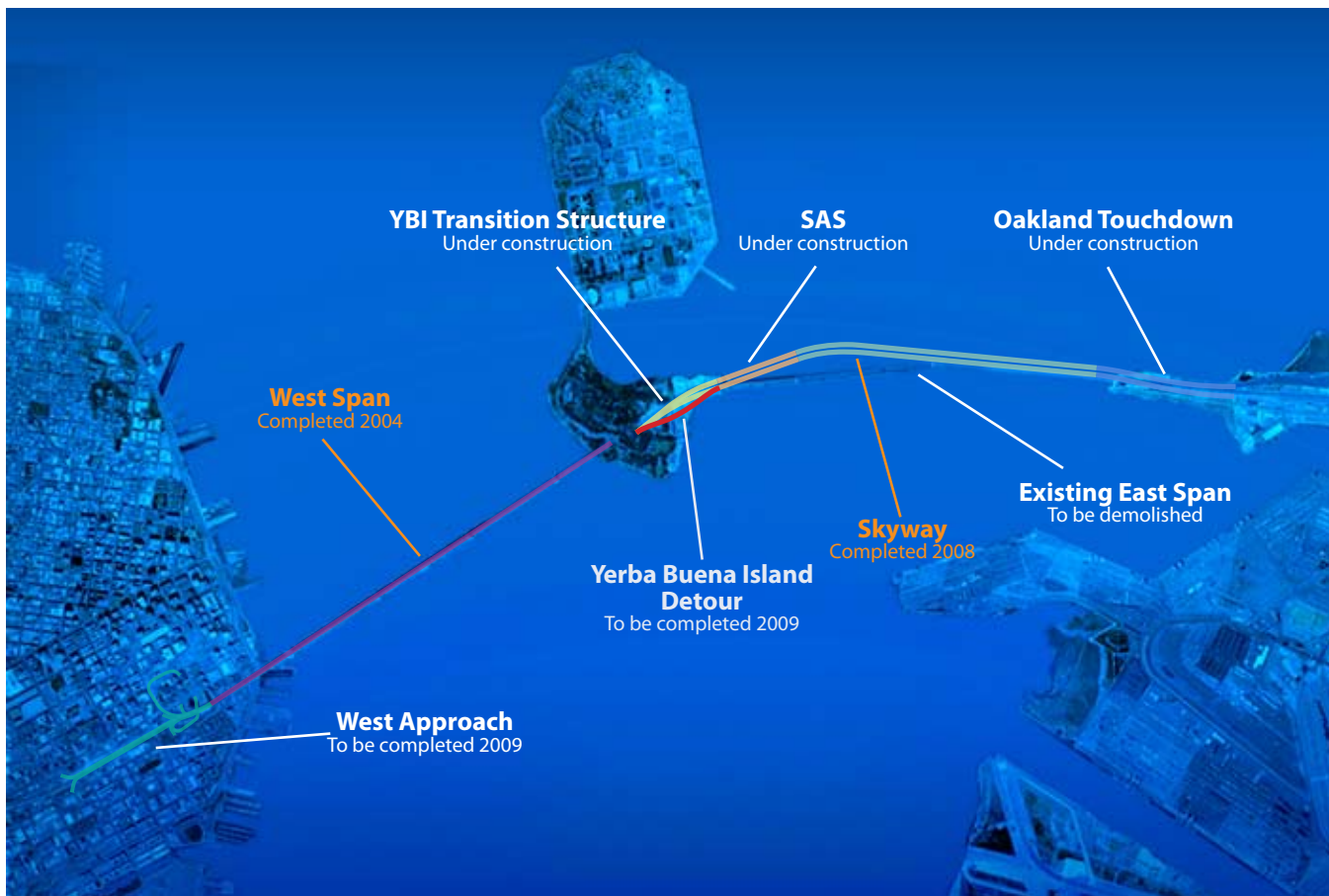
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Traffic flowing smoothly on the new permanent decks of the West Approach

2009 LEGISLATIVE UPDATE



EAST SPAN CONTINUES TO TAKE SHAPE

The silhouette of the new East Span continued to grow in 2008, making it easier for drivers to see how the original double-deck cantilever bridge will eventually be replaced with graceful parallel roadways that offer expansive views of the bay. With the Skyway complete, most activity on the East Span is moving west toward Yerba Buena Island.

Yerba Buena Island is a hive of activity, as workers toil on the temporary detour that will shift traffic so construction can begin on the Yerba Buena Island Transition Structure (YBITS). Crews are also busy working on the Self-Anchored Suspension (SAS) Span's temporary structure that will support the SAS' roadways until the main cable can be placed.



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Simulation of the completed Bay Bridge including the Self-Anchored Suspension Span and Skyway

SELF-ANCHORED SUSPENSION BRIDGE

If one single element bestows the status of world-class on the new Bay Bridge, it is the Self-Anchored Suspension Span (SAS). This engineering marvel will be the world's largest SAS bridge—at 2,047 feet long—as well as the first bridge of its kind built with a single tower.

The SAS is not just another suspension bridge. Traditional main cable suspension bridges have twin cables with smaller suspender cables connected to them. These cables hold up the roadbed and are anchored to separate structures in the ground. While there will appear to be two main cables on the SAS, there will actually be only one. This single cable is anchored within the eastern end of the roadway. The cable

is carried over the tower and wraps around the two side-by-side decks at the western end, then back up and over the tower to anchor back into the eastern end of the SAS roadway.

The SAS and the rest of the new East Span is being built north of the existing bridge. By switching from the existing East Span's double-decks to side-by-side roadways, drivers will enjoy unencumbered and expansive views of the Bay Area as they pass beneath an angled canopy of suspension cables. The SAS, and Skyway, will feature a 15-foot-wide cantilevered bicycle and pedestrian path on the eastbound side of the bridge, so those traveling on foot or two wheels between Oakland and Yerba Buena Island (YBI) can enjoy majestic views of the bay as well.



Simulation of completed Skyway, looking west toward Yerba Buena Island

MARINE SUPPORTS COMPLETED

The completion of the SAS' two marine support structures is a testament to determination and persistence. T1 and E2 will support the SAS tower and the SAS' eastern end, respectively. The contract for the two piers was accepted in January, marking the end of a challenging, yet ultimately rewarding, construction project.

T1 will support the SAS' single elegant tower, which will rise 525 feet above sea level. T1 includes a massive steel footing box (85 feet long and 73 feet wide) welded to steel shells surrounding 13 concrete piles, which reach down nearly 200 feet into the bay to anchor into bedrock. E2 consists of two enormous concrete columns that reach approximately 120 feet above the water.

One of the biggest hurdles that crews deftly overcame was deep water construction. When pile driving in water as deep as the San Francisco Bay, the stability of the bedrock is not always assured. Engineers were confident that they would secure the piles into bedrock 320 feet below the water's surface—yet this had never been done before, and engineers knew that despite their diligence and confidence, success was not necessarily guaranteed.

A second challenge was the tight squeeze created by the immensity of the steel plates used for the foundations, particularly T1. The massive plates made access to certain areas of T1 extremely tight, making crews' work even more physically demanding.

Despite the unknowns beyond the engineers' control—from tighter-than-expected working conditions to the stability of the bay's bedrock—the success of the foundations was critical. While other projects might get more attention, the foundations are the backbone of the project's success. While the foundations' successes have been largely quiet ones, any construction setbacks—of which there were none—would have resonated throughout the entire East Span loud and clear.

BUILDING A BRIDGE TO BUILD A BRIDGE

Temporary support structures have begun to rise out of the bay at Yerba Buena Island, as construction moves forward on the Self-Anchored Suspension (SAS) Span. To build the SAS, crews must first construct a temporary bridge to support work on the permanent span. Crews are building a 20,000 ton temporary bridge to build a 50,000 ton permanent bridge.

While the SAS will only have three supports, the temporary structure will have seven. The foundations for the first four temporary supports have already been built, as have two of the seven columns. A third temporary column was under construction at the end of 2008, while the steel for three more temporary supports arrived at year's end. Steel for the temporary structure is being supplied by Shanghai Zhenhua Port Machinery Company in



Pier E2 columns nearing completion

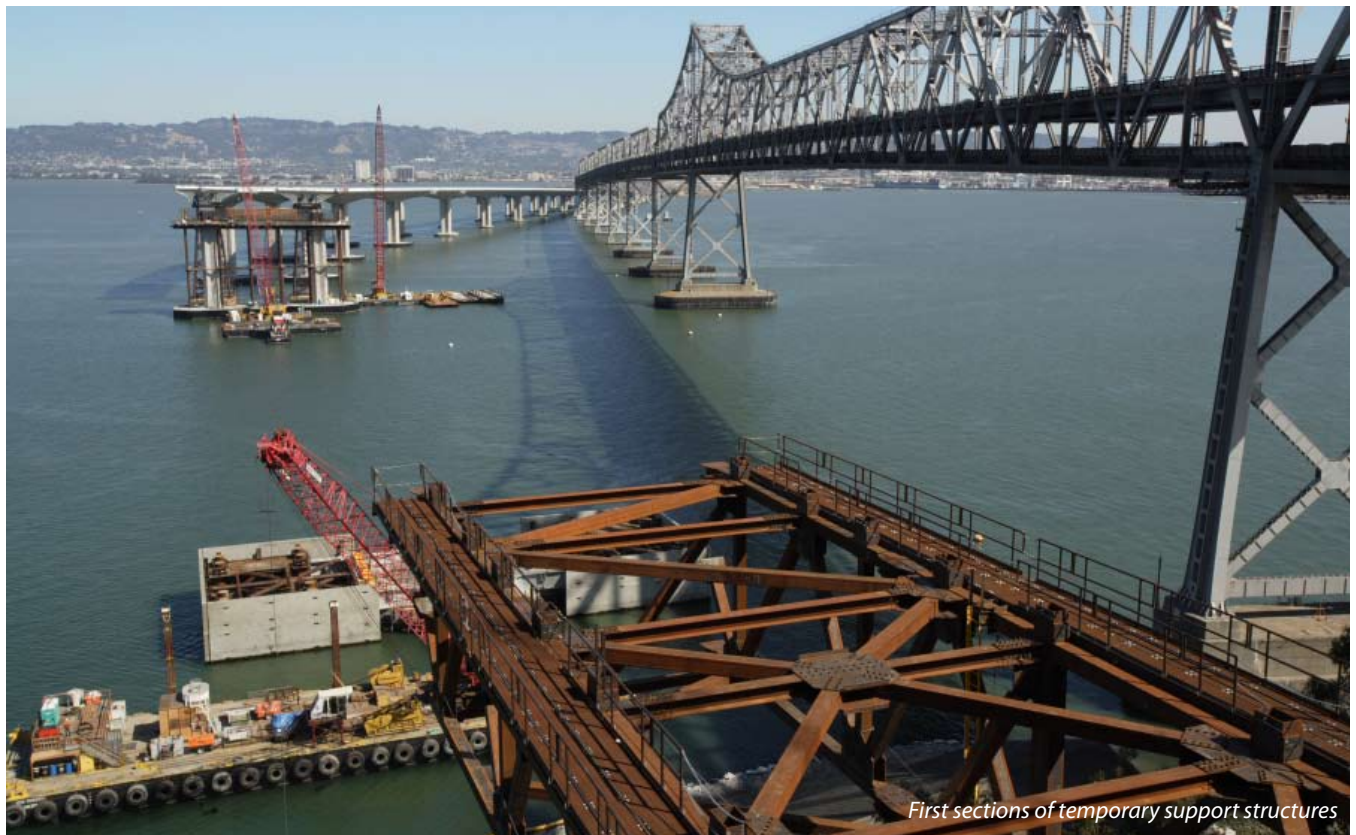


Tie-down rods on the SAS foundation



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First sections of temporary support structures

China and American Bridge Manufacturing in Oregon. Other companies involved in fabrication are Jesse Engineering and XKT Engineering (pile driving frames), and Traylor Dutra and Twin Brothers (piling suppliers), all based in the United States.

Reporters visited the work site in September to see the temporary structures firsthand, which led to a front page headline in the *San Francisco Chronicle* proclaiming “New Bay Bridge Span On Road to Being Icon.”

While drivers on the existing East Span will see these temporary structures, they look nothing like the final bridge that will grace the Bay Area with an elegant and sweeping design. The temporary work includes steel trusses and multiple support structures; the SAS will be a graceful white span with only three supports.

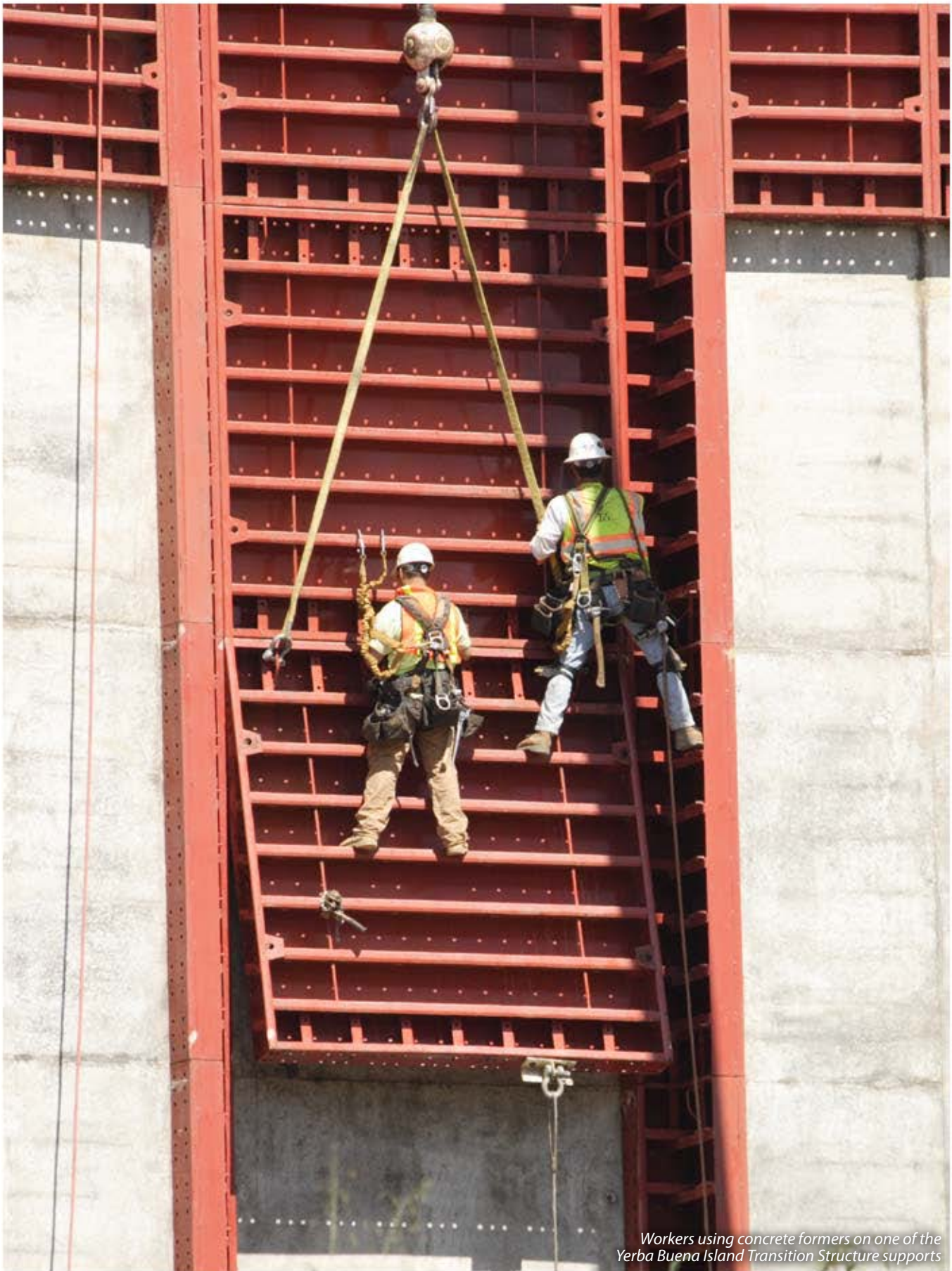
To build a different kind of suspension bridge requires a different kind of process. Traditional suspension span construction starts with the main cable and suspender cables being placed, and then the roadway being built. Traditional suspension spans also have two main cables that are anchored into the foundations. The SAS has only one cable that is anchored at the east end of the span, wraps around the west end, and then anchors back into the east end. Because of this unique design, the roadway must be built first.

As workers build the temporary supports, crews will begin erecting the permanent roadway and signature tower for the SAS. Assisting this endeavor will be a barge equipped with a 300-foot-long boom that will be visible to drivers on the Bay Bridge. Crews will not wait until the entire temporary structure is in place to start on the permanent SAS. The temporary structures are being built west to east from YBI toward the Skyway. Crews have already built the temporary steel truss that will hold up the permanent roadway between the first two temporary supports, while the truss between the second and third supports is under construction.

In addition to temporary foundations and roadway, crews will erect a temporary footbridge that will travel the path of the SAS cable, so ironworkers can work on the cable as it is placed.

Once the permanent SAS span is in place, the temporary supports will be removed, shifting the weight off the temporary foundations and onto the cables.

While work on the temporary structures will continue throughout 2009, a major milestone will be the placement of the last two in-water foundations for the temporary SAS support structure in spring 2009. This will be the last time in-water foundation work—temporary or permanent—is done in the San Francisco Bay for the new East Span.



Workers using concrete formers on one of the Yerba Buena Island Transition Structure supports



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Welding steel for the Self-Anchored Suspension Span

BRIDGE FABRICATION

Fabrication of the SAS deck and towers sections continued throughout 2008, with the first section expected in the Bay Area in early 2009. Shanghai Zhenhua Port Machinery Company (ZPMC) in China is a major steel fabricator for the SAS. ZPMC is already known in the Bay Area as a supplier of port cranes for the Port of Oakland.

While fabrication of the SAS road decks and tower began in late 2007, teams started preparing in late 2006, conducting training and developing the assembly line. That year-long preparation has paid off, as fabrication was fully underway and ongoing throughout 2008.

Despite some initial delays and anticipated challenges, the fabrication process is moving forward under the close watch of the SAS project team and Risk Management Team to ensure that the SAS comes in on-time and on-budget. A Caltrans oversight team is on site in China for both quality control and quality assurance, watching over the fabrication of steel before, during and after the process.

The first fruits of this labor—the westernmost SAS road deck segments—will arrive in the Bay Area during the first half of 2009. These shipments take approximately one month to travel by ship from China to the Bay Area. The shear leg crane barge needed to lift these massive segments into place will arrive during the first few months of 2009.

Bridge sections are being fabricated in more than 35 locations around the world, from Oslo, Norway to Seoul, South Korea. In the United States, fabrication is taking place in more than 25 cities, with 12 of those in California.



Road sections for the Self-Anchored Suspension Span



YBI Detour decks from Korea



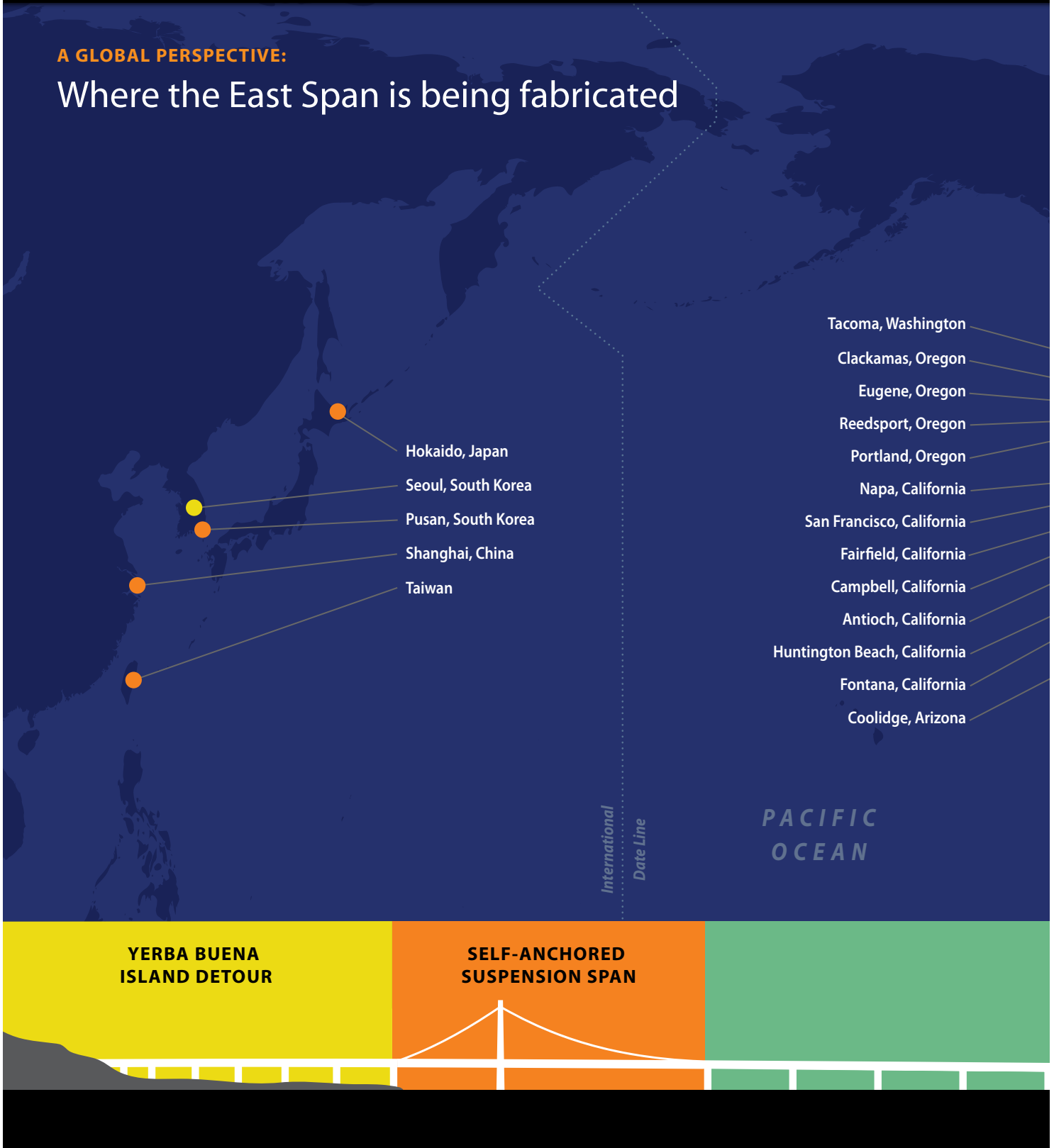
Cast steel saddle from Japan



SAS Tower segments from China

A GLOBAL PERSPECTIVE:

Where the East Span is being fabricated





T1 Footing Box from Texas



Concrete Skyway segments from California

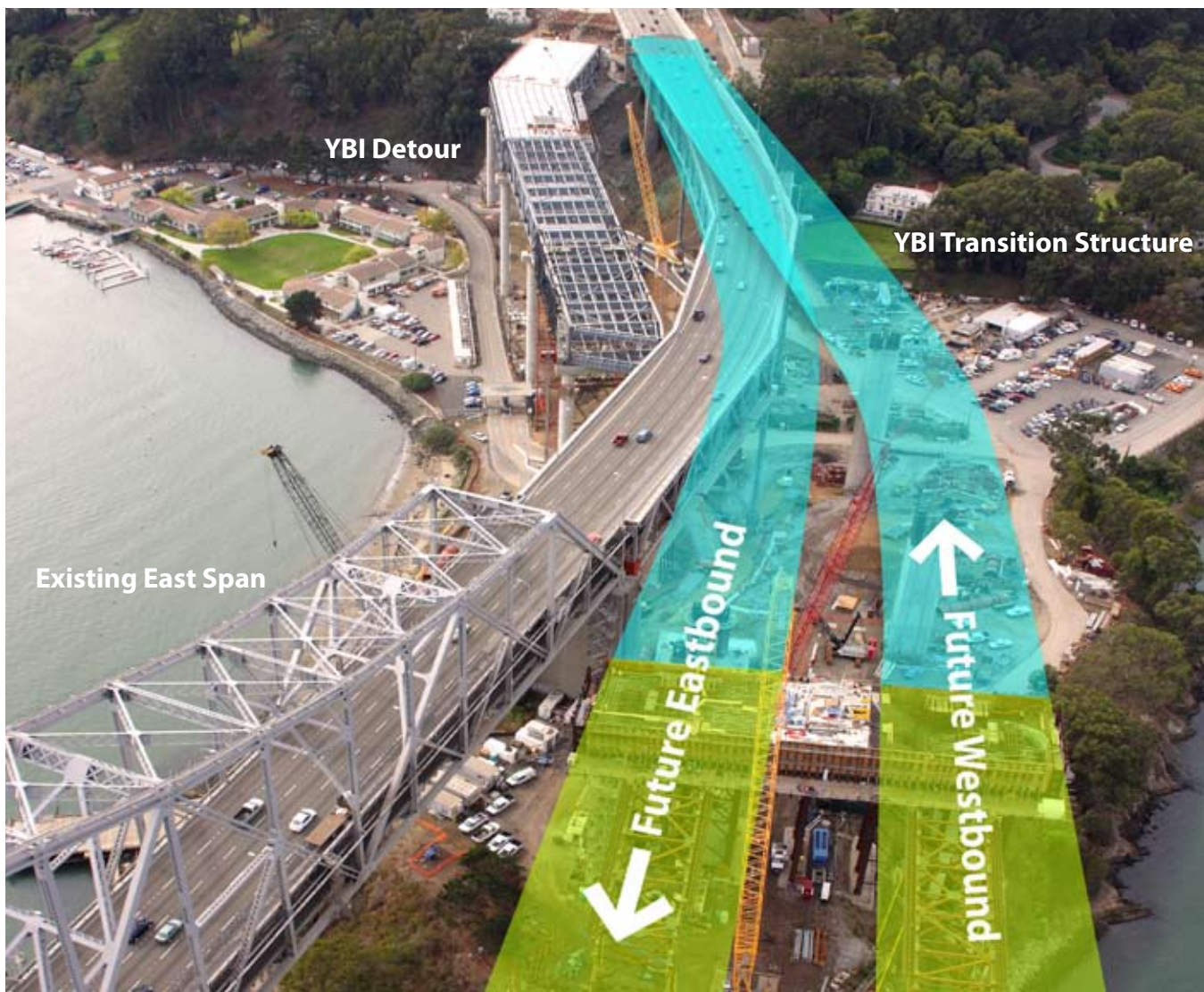


Steel components for OTD from California



SKYWAY

**OAKLAND
TOUCHDOWN**



YERBA BUENA ISLAND TRANSITION STRUCTURE & TEMPORARY DETOUR

While the Yerba Buena Island Transition Structure (YBITS) is one of the shortest projects on the Bay Bridge, it is one of the most important and challenging, as it will transition traffic from the parallel decks of the East Span to the double-decks of the Yerba Buena Island tunnel and West Span.

Of the YBITS' 13 supports (footings and columns), three have been substantially completed, and seven are in progress. This YBITS advance work was attached to the contract to build a temporary detour south of the existing bridge. By building the advance work (on the north side of the bridge) concurrently with the detour, work can begin on the YBITS' main structure after traffic shifts to the detour. Doing the support work in advance moves the YBITS' foundations off the critical path, thereby saving crucial time.

Next year will also see the YBITS #1 Contract go out to bid in July; the bid was advertised in August 2008 and includes op-

portunities for small businesses. The contract will focus on the main structure, including the roadways.

The bid will be awarded shortly after the highly anticipated traffic switch to the 900-foot temporary Yerba Buena Island Detour on the south side of the existing span. Traffic is being rerouted so crews can build and connect the YBITS without reducing or impeding traffic flow. Work on the YBITS' main structure cannot begin until traffic has been safely routed to the temporary detour.

For the West Tie-In (WTI)—the section of the detour closest to the YBI tunnel—most of the substructure, including support structures, was completed in 2008. All of the piles for the supports were driven, and most of the support structure (footings and columns) were built as well. The frame and roadway for the WTI is currently in progress.



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All of the steel for the detour's viaduct (middle section) was erected in 2008, as were the support structures. Dongkuk Steel of South Korea fabricated the steel for the viaduct. By the end of 2008, approximately 40 percent of the deck concrete had been poured.

The East Tie-In (ETI)—the easternmost section of the detour that will connect to the existing East Span—is the most challenging component of the detour, as it is not being built in place. Instead, it is being built 100 feet in the air and adjacent to where it will finally rest. In late summer or early fall 2009, a 288-foot-long section of the existing bridge will be cut away and shifted to the north as the ETI is rolled in, connecting the detour to the bridge. The herculean endeavor will involve aerial construction taking place more than 100 feet over Yerba Buena Island. This will be one of the most significant realignments on the bridge to date, as traffic will flow on the detour until the new East Span opens.

Approximately 40 percent of the ETI's foundations were complete at the end of 2008. The first steel was erected at the end of 2008 in the first columns of the ETI supports. The steel for the supports is being fabricated by Thompson Metal Fab in Wash-

ington state. Stinger Welding in Coolidge, Arizona is providing the steel for the ETI's trusses. The steel is approximately 75 percent fabricated.

While the traffic switch poses its own challenges, construction of the detour has not always been without its hurdles. An existing Coast Guard base is adjacent to the construction, so crews have been mindful to maintain around-the-clock access to the base. Crews have also been diligent about keeping nearby Macalla Road—heavily used by construction crews—repaired so as not to inconvenience residents and visitors to Yerba Buena Island.

Ensuring safety is paramount for all workers throughout the seismic retrofit projects. That commitment to safety has resulted in not a single fatality at any of the Bay Bridge construction sites. Workers on Yerba Buena Island are under unique constraints to ensure safety, as work occurs in a populated yet very confined environment. Crews are involved in everything from trimming trees and brush to reduce the risk of fires to directing traffic so residents and visitors safely bypass construction activity.



SKYWAY

Another project completion milestone is the Skyway. As the longest section of the new East Span at 1.2 miles, the graceful parallel decks of the Skyway not only will change the appearance of the Bay Bridge, but also the way drivers experience the bridge, thanks to sweeping unencumbered views of the bay. The side-by-side east- and westbound decks will each have five lanes and 10-foot-wide shoulders to help keep traffic flowing.

The completion of the Skyway also represents a huge leap forward for bridges designed specifically to move during a major quake, as it features several state-of-the-art seismic safety innovations. For additional seismic stability, the Skyway marine foundations consist of 160 concrete-filled steel pipe piles

In addition, 60-foot-long hinge pipe beams connecting the Skyway to the SAS will allow deck segments on the Skyway to withstand greater motion and to absorb more earthquake energy. In the event of an earthquake, damaged fuses inside the hinge-pipe beams, which will have absorbed the brunt of the earthquake's energy, can be removed and replaced.

The Skyway's decks are composed of 452 pre-cast concrete segments (standing three stories high), and will contain approximately 200 million pounds of structural steel, 120 million pounds of reinforcing steel, 200,000 linear feet of piling, and about 450,000 cubic yards of concrete. These are the largest segments of their kind ever cast, and they were lifted into



The Skyway reaches toward Yerba Buena Island, with the original East Span behind it

measuring 8 feet in diameter and dispersed among 14 sets of piers. The 365-ton piles were driven more than 300 feet into the deep bay mud. The new East Span piles were driven in at an angle (battered), rather than vertically, to obtain maximum strength and resistance. This was done by using one of the world's largest hydraulic hammers, which generates 1.2 million pounds of force. To lessen the impact of pile driving on fish and other marine life, dense columns of air bubbles were created around the piles underwater. The bubbles help dissipate the shock waves produced by hammering.

place by winches that were custom-made for this project.

The Skyway also features a 15.5-foot-wide bike/pedestrian path which is being built on the south side of the eastbound deck and will extend to Yerba Buena Island along the SAS. This effort moves the Bay Area closer to completing the proposed 400-mile multi-use Bay Trail, which will connect all nine Bay Area counties. The path will include seven viewing platforms that will allow pedestrians and bicyclists to enjoy sweeping vistas of the bay and hills.



TOLL BRIDGE PROGRAM
OVERSIGHT COMMITTEE

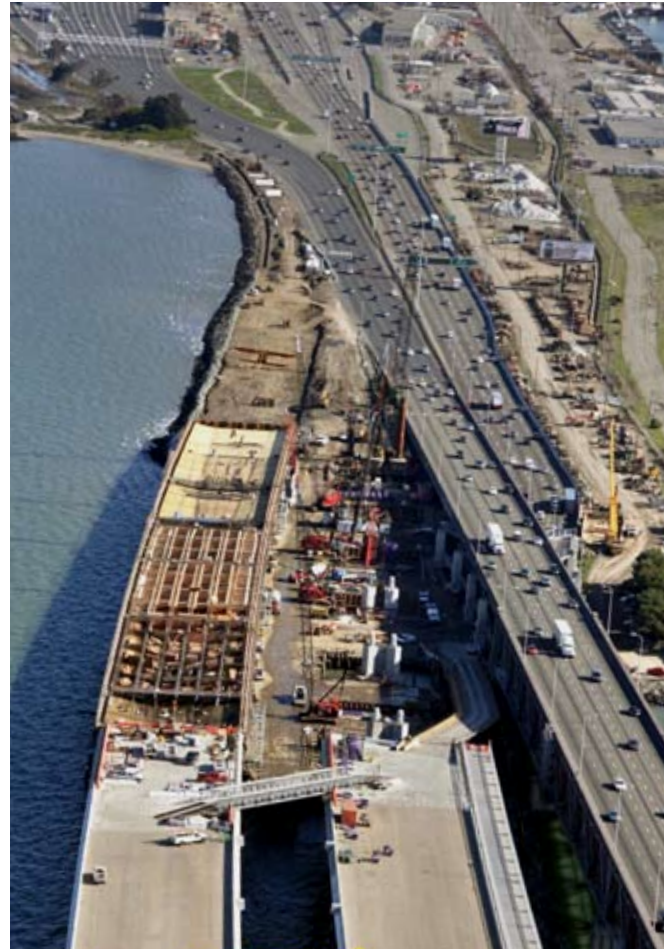
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OAKLAND TOUCHDOWN

The Oakland Touchdown #1 Contract was awarded to MCM Construction in August 2007, and construction was fully underway in 2008. Crews built the entire substructure (i.e., piles, footings and columns) for both the westbound and eastbound roadways in 2008. To erect the substructure, crews first built a temporary trestle to provide access. The trestle is an essential measure to protect the sensitive Oakland shoreline from construction impacts.

Construction also began in 2008 on the 1,000-foot-long stretch of the westbound roadway, from the toll plaza in Oakland to the Skyway. Nearly 40 percent of the westbound roadway's frame was built by the end of 2008, with the entire frame expected to be completed in spring 2009. Crews also erected all temporary support structures for the westbound roadway, and began constructing that westbound deck in late 2008, including the first concrete pour. Construction also began on 500 feet of the eastbound approach, with initial work in 2008 on the eastbound frame.

Engineering work continues on the Oakland Touchdown #2 Contract, where construction is scheduled to start immediately after westbound traffic shifts to the new East Span. This contract will complete the remaining section of the eastbound structure and roadway.



Aerial view of the Oakland Touchdown



Work on the Oakland Touchdown foundations



The SAS' two marine foundations—T1 (bottom) and E2 (top) came in ahead of schedule and under budget, thanks to the risk management team

RISK MANAGEMENT

Risk management, as mandated by AB 144, is a critical component of the Bay Bridge Seismic Retrofit Projects, ensuring that construction and engineering jobs are on time and on budget. The risk management plan developed by Caltrans reflects a methodical approach of planning for, identifying, analyzing, responding to, and monitoring project risks. The goal is to help project leaders efficiently complete their projects while mitigating risks that might impede their success. While all project leaders are dedicated to ensuring the progress and success of their projects, the Risk Management Program serves as an additional layer of oversight.

The National Cooperative Highway Research Program (NCHRP) has hailed the Bay Bridge approach to risk management as a sophisticated model for other transportation programs throughout the country. The NCHRP praised how “the overriding goal of the program is to help to keep the Bay Bridge Seismic Safety Projects on schedule and within budget.” As the program has evolved, it has gained broad acceptance and is now an integral component of program and project management.

This unique process takes a comprehensive and fully integrated approach to each phase of risk management, guided by a dedicated and focused team that identifies and assesses potential risks and opportunities for each project on the East Span, thereby helping reduce program costs and keep projects on track.

Risk management has helped deal with the inherent risks in a project as massive and complex in scope and scale as the Bay Bridge. In 2008, the risk mitigation program worked closely with the SAS project team, focusing on issues including fabrication of the tower and deck segments, fabrication of the cable, and the procurement and delivery of the crane barge.

Knowing that even one day of delay can be millions in budget overruns, 2008 is a testament to everyone’s dedication to mitigating delays and finding ways to accelerate construction schedules. The Skyway and the SAS marine foundations (T1/E2) came in ahead of schedule and under budget in 2008. In 2009, the risk management team will work diligently to ensure that the traffic shift to the temporary structure on Yerba Buena Island is on time, so that awarding YBITS Contract #1 is not delayed.



TOLL BRIDGE PROGRAM
OVERSIGHT COMMITTEE

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION

PROTECTING THE ENVIRONMENT— ACTING LOCALLY, LEADING GLOBALLY

The San Francisco Bay is home to one of the most diverse ecosystems in the world. To protect this ecological treasure, we have implemented a comprehensive program to protect the bay's fragile environment during construction activities.

California has always led the nation—and often the world—when it comes to protecting the environment. We are taking numerous steps to make sure the Seismic Retrofit Projects do not impact the environment around the bridge, from wildlife and plants to the bay waters. A team of dedicated environmental professionals and wildlife monitors conduct weekly walkthroughs of the entire construction corridor to ensure that all projects are compliant with environmental laws, resource agencies' permits and environmental document commitments. Environmental staff also often respond to a variety of unexpected challenges. Specific efforts include:

- **COSCO BUSAN**—In late 2007, the oil tanker Cosco Busan struck the Bay Bridge, spilling oil into the bay. Our environmental team was involved in all aspects of clean up, including the initial deployment of oil booms to protect shorelines, rescuing oiled shorebirds and coordinating their transport and treatment with wildlife rescue and care centers, and the inspection, damage assessment and facilitation of clean up activities.
- **WATER QUALITY**—A combination of soil erosion and sediment control methods are used to provide more effective pollution protection in the bay. Additionally, waste management and materials pollution control best practices are implemented for all waste, hazardous materials, and equipment located on the project. Caltrans and the construction contractors work closely together to monitor each project area. An inspection program is in place to assist with identifying any deficiencies that may need to be corrected. If deficiencies are determined, Caltrans and the contractors work closely together to deter-



Platforms under the Skyway provide nesting habitats for cormorants



Eelgrass, critical to the Bay's ecosystem, is protected during construction

mine the appropriate corrective action. The San Francisco Regional Water Quality Control District (Water Board) is formally notified when any major changes to the project are made. The team work between Caltrans and the contractor have made it possible to keep a good working relationship with the Water Board, and to comply with the National Pollutant Discharge Elimination System Permit.

- **BIRDS**—Platforms under the East Span will provide a nesting habitat for cormorants that currently roost under the Bay Bridge. Crews are also constructing a 500-square-foot island to serve as a habitat for roosting shorebirds, including the snowy egret and the ruddy turnstone. The team also helped collect and transport injured birds, including orphaned goslings and injured cormorants. Efforts have also minimized conflicts between birds and traffic by keeping Canada geese from trying to cross eastbound lanes of I-80.
- **FISH AND MARINE MAMMALS**—Teams monitor for marine mammals during pile driving and other deep-water activity. Technology also helps protect fish and other marine life by dampening sound waves during pile driving. In 2008, we helped with the rescue of a seal lion that was treated at the Marine Mammal Center in Sausalito, and successfully released at Point Reyes National Seashore. Teams also removed fish that otherwise would have been trapped by the placement of a temporary coffercell system as part of the construction of a temporary SAS support at the eastern edge of Yerba Buena Island.
- **EELGRASS**—This aquatic plant is crucial to the Bay's ecosystems, as it serves as a critical marine habitat and improves water quality by collecting and filtering organic matter and sediments. We have taken several steps to protect eelgrass beds, including installing remote turbidity monitors that measure changes in water quality which can impact eelgrass.



GATEWAY PARK

The vision for Gateway Park represents an unprecedented opportunity to create what is potentially the most significant new public place in not just the Bay Area, but all of California. Building the new East Span, and the transfer of the former Oakland Army Base to the City of Oakland, have led to this once-in-a-lifetime opportunity to transform 200 acres into a world-class waterfront public space.

Combining parkland and urban development, the potential for Gateway Park is unlimited. The final development will be visible to motorists, bicyclists and pedestrians traveling across the new East Span of the Bay Bridge, and will serve as a high-profile iconic entry to the East Bay. In turn, Gateway Park will provide stunning views of the Bay, the San Francisco skyline, the Port of Oakland, Yerba Buena Island and the graceful new East Span.

In July, a visioning session attracted major stakeholders including Oakland Mayor Ron Dellums, the Toll Bridge Program Oversight Committee, Caltrans, Bay Area Toll Authority, the California Transportation Commission, the City of Oakland, the San Francisco Bay Conservation and Development Commission and the East Bay Regional Park District. All who attended agreed that a world-class vision was needed for this world-class site.



TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION



An analyst with the San Francisco Bay Conservation and Development Commission presents development concepts

This led to a four-day gathering in September, during which local and national planners and designers met with local and regional stakeholders to present and discuss potential development and land use concepts, as well as ideas for access and economic development potential.

The session concluded with a synthesis of the concepts presented as well as ideas generated during discussions and brainstorming sessions. Stakeholders plan to come together again in February 2009 for another visioning conference to further discuss refining concepts and the master plan for Gateway Park.

Development concepts for Gateway Park



Proposed site for Gateway Park



BayBridgeInfo.org homepage

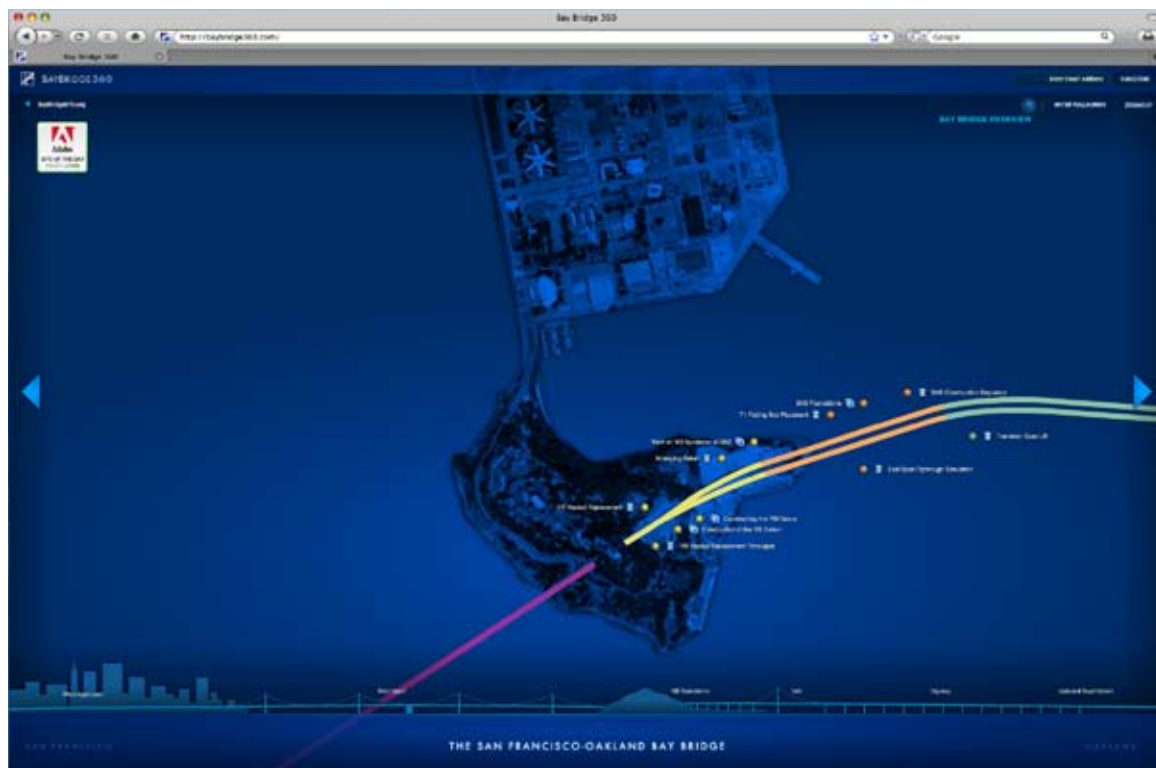


BayBridge360 presenting a slide show

OUTREACH/COMMUNICATIONS

One word sums up the progress made in stakeholder outreach in 2008: innovation. From developing unique rich media content for the project Web site to partnering with some of the leading technology companies in the world, 2008 has been the most successful—and rewarding—year yet for pioneering new ways to reach the public and other stakeholders.

These efforts go far above and beyond the day-to-day outreach efforts of the public information teams, as well as their incredible efforts for major milestones, such as the Yerba Buena Island viaduct replacement in 2007. These additional ambitious efforts, described below, help educate and inspire the public in extraordinary ways that provide unique perspectives of the Bay Bridge.



The award-winning BayBridge360 interface. Each colored dot launches a different media presentation.



A original title and closing sequence with music has been designed to create a unique "brand" to the SFOBB media projects

THE BAY BRIDGE ONLINE

In September, the Public Information Office launched a new addition to the Bay Bridge Web site, **BayBridgeInfo.org**. This new site—**BayBridge360**—is replete with rich media, offering bridge enthusiasts and the merely curious the opportunity to view spectacular and rarely seen videos and images of the seismic retrofit projects.

BayBridge360 features an innovative graphical interface that allows visitors to zoom in and out of key sections of the bridge. Visitors can watch videos, slide shows and animated simulations, each focusing on a key aspect of the Bay Bridge project. The videos are concise yet engaging.

New content will be added to the section as the projects progress, with visually dynamic videos that not only capture the excitement and magnitude of the projects, but also provide a rare, front-row seat to watch history being made.

The section, which has attracted viewers from around the world, received acclaim from software company Adobe Systems, which named BayBridge360 as its "Site of the Day" on October 1. Adobe noted that "keeping people informed about their community as well as their tax dollars at work is important, and this site provides all the necessary details in an effective and captivating way."

Visitors can watch an animated simulation of the highly anticipated new East Span, including the pedestrian/bicycle path. While the simulation provides sweeping views, numerous videos on BayBridge360 offer a more intimate, close-up glimpse of the extraordinary construction work taking place right now. The complexity of the construction has to be seen to be believed, and viewers finally have that unique opportunity.

Visitors will find videos that tell the story of this bridge, including an overview of the seismic retrofit projects; the time-lapse video showing crews rolling in the 350-foot-long, 6,500-ton section of viaduct on Yerba Buena Island during Labor Day weekend 2007; and conceptual videos such as "Wrangling Rebar," showing construction crews working with the steel reinforcing bars in often unique and precarious situations.

Examples of BayBridge360 content



Wrangling Rebar Video



Simulated "fly-through" of the completed SAS



Timelapse demolition on the West Approach



Timelapse of the YBI Viaduct replacement

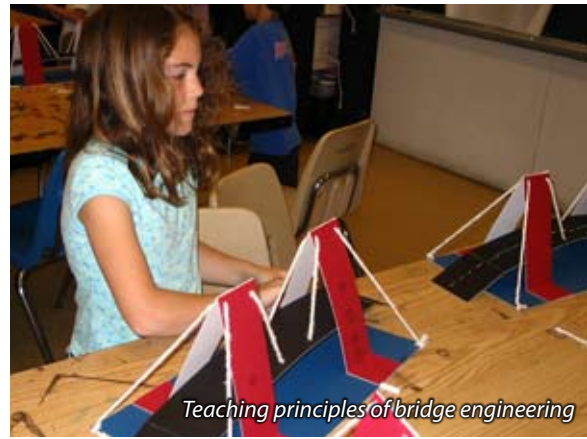


Slideshow of YBITS advance work

EDUCATIONAL OUTREACH

To better educate students about the Bay Bridge, as well as the numerous vocations involved with the retrofit projects, a dedicated educational outreach subcommittee was developed in 2008. The subcommittee identified numerous components to reach and educate students of all ages throughout the Bay Area.

One such opportunity is an in-class program that will visit elementary and middle schools in San Francisco and Oakland with presentations and a reading program about the Bay Bridge and retrofit projects that relate to the students' curriculum. The subcommittee has also discussed partnerships with two leading educational and science institutions in the Bay Area—the Lawrence Hall of Science (LHS) at the University of California at Berkeley, and The Exploratorium in San Francisco. The subcommittee has already begun developing educational content with LHS.



Teaching principles of bridge engineering



Bay Bridge models at Autodesk Gallery

Google Earth

Another technology leader choosing to partner with the Bay Bridge team is Google. The inclusion of the new Bay Bridge in Google Earth—which allows users to view satellite images, maps, terrain and 3D images—marks the first time an in-progress construction project will be represented in Google Earth. The finished sections of the new East Span will appear next to the original East Span, while the sections that have yet to be built (such as the SAS) will appear transparent. Visitors who click on the new East Span will see a pop-up window with more information about the bridge, as well as a link to the project Web site.



New East Span on Google Earth

Yerba Buena Island Public Information Office

A dedicated and fully-staffed public information office opened on Treasure Island in 2008, to keep residents and businesses on the island informed of the latest construction updates. This office will play an extremely critical role in the coming years, particularly during the flurry of activity around the construction of the SAS and YBITS.



Treasure Island Public Information Office



TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION



SMALL BUSINESS PROGRAM

The Small Business Program continued to make strides in 2008 toward its goal of involving the small business community in the seismic retrofit projects. The focused and dedicated team, which expanded this past year, concentrated on promoting and enhancing contracting opportunities for disadvantaged, small and disabled veteran's business enterprises (DVBE). The team is committed to achieving these goals by providing ongoing support services, and ensuring these businesses are aware of contracting opportunities.

The team works closely with the Toll Bridge Program and prime contractors to identify opportunities and to meet California's small business and DVBE participation goals, which are 25 percent and 3 percent of all contracts, respectively.

In 2008, the team continued its documentation and reporting of small business and DVBE participation and commitments to include these businesses in construction contracts on the East Span.

The Toll Bridge Program tracks Prime Contractor small business and DVBE participation commitments on the SAS, temporary detour and Oakland Touchdown #1 contracts. Through the end of 2008, prime contractors have committed more than \$60 million in work to 40 small businesses and DVBEs. As a result of the team's partnering efforts on the Oakland Touchdown #1 Contract, the Statewide Small Business Council issued a Certificate of Recognition to MCM Construction for its ongoing efforts to provide contracting opportunities to small businesses.

To extend even more opportunities, the Small Business Program participated in the bidder's conference for YBITS Contract #1, which generated positive feedback from the small business community.

The program also worked in 2008 to develop additional courses and to identify potential education partners, the results of which will be presented to small businesses and DVBEs in 2009.



Small business owners attend a workshop

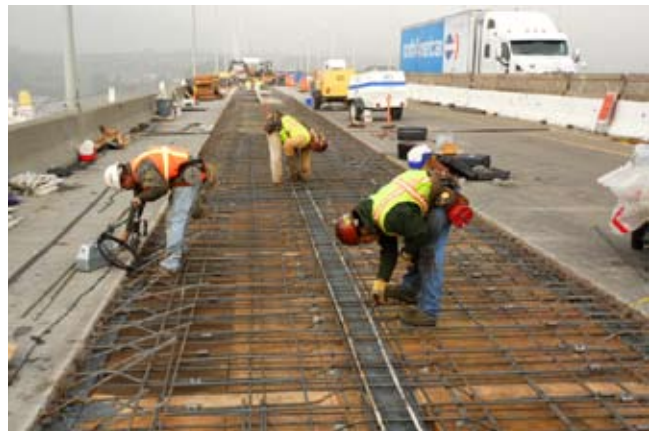
BENICIA-MARTINEZ BRIDGE

The original Benicia-Martinez Bridge, built in 1962, began undergoing a two-year reconfiguration that will eventually convert the entire bridge into four southbound lanes, with shoulders on both sides and a bicycle/pedestrian path. In 2008, the new northbound Benicia-Martinez Bridge opened to traffic in August just east of the original bridge.

The reconfiguration contract was awarded to American Civil Constructors and Top Grade Construction, a joint venture, in November 2007. To date, crews have rehabilitated the original northbound lanes by replacing all of the joints and damaged parts of the deck, as well as demolishing the original toll plaza. Southbound traffic has been shifted from the original southbound lanes to the repaired northbound lanes. In 2009, crews will replace the joints and deck of those southbound lanes.

Crews also have fixed the steep roadway undulation on northbound Interstate 680 just south of the Benicia-Martinez Bridge. Alterations have also been made to the Interstate 680/Interstate 780 interchange to better accommodate southbound and northbound traffic flowing on two separate bridges. Additionally, crews have begun raising nearby Marina Vista Road (leading to downtown Martinez), which often closes due to flooding during winter rains.

Work on the reconfiguration is expected to be entirely completed by late 2009, several months ahead of schedule.



TOLL BRIDGE PROGRAM
OVERSIGHT COMMITTEE

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION

DUMBARTON AND ANTIOCH BRIDGES

A new seismic study released in late 2008 revealed an urgent need to retrofit the Antioch and Dumbarton bridges, built in 1978 and 1982, respectively. As both bridges were built to seismic standards of the time, neither were considered at risk at the time the state Toll Bridge Seismic Retrofit Program (TBSRP) was established in 1997. Due to findings from recent earthquakes, seismic standards are now much more stringent. The 1.8-mile-long Antioch Bridge carries 15,000 vehicles daily. The 1.6-mile-long Dumbarton Bridge carries 60,000 vehicles daily.

The three-year study—compiled by Caltrans and BATA—recommends that the TBSRP be expanded to include these two bridges. The study shows that both spans require significant seismic upgrades to protect public safety. The combined cost is \$950 million—\$637 million for Dumbarton and \$313 million for Antioch. These costs are consistent with similar TBSRP retrofit projects, given the escalation of prices for labor and materials. Actual costs might be lower, as figures for both retrofits include evaluation and design expenses, as well as substantial contingencies to allow the TBSRP to address unexpected issues that might arise during the four-year retrofit process.

BATA will need to raise tolls on the region's seven state-owned toll bridges to address three critical challenges: the nearly \$1 billion needed to retrofit the Antioch and Dumbarton bridges; a steady decline in toll-paying traffic since 2004; and fundamental changes in the municipal bond market since the credit market crisis began in the summer of 2007 that have increased BATA's borrowing costs by approximately \$35 million annually.

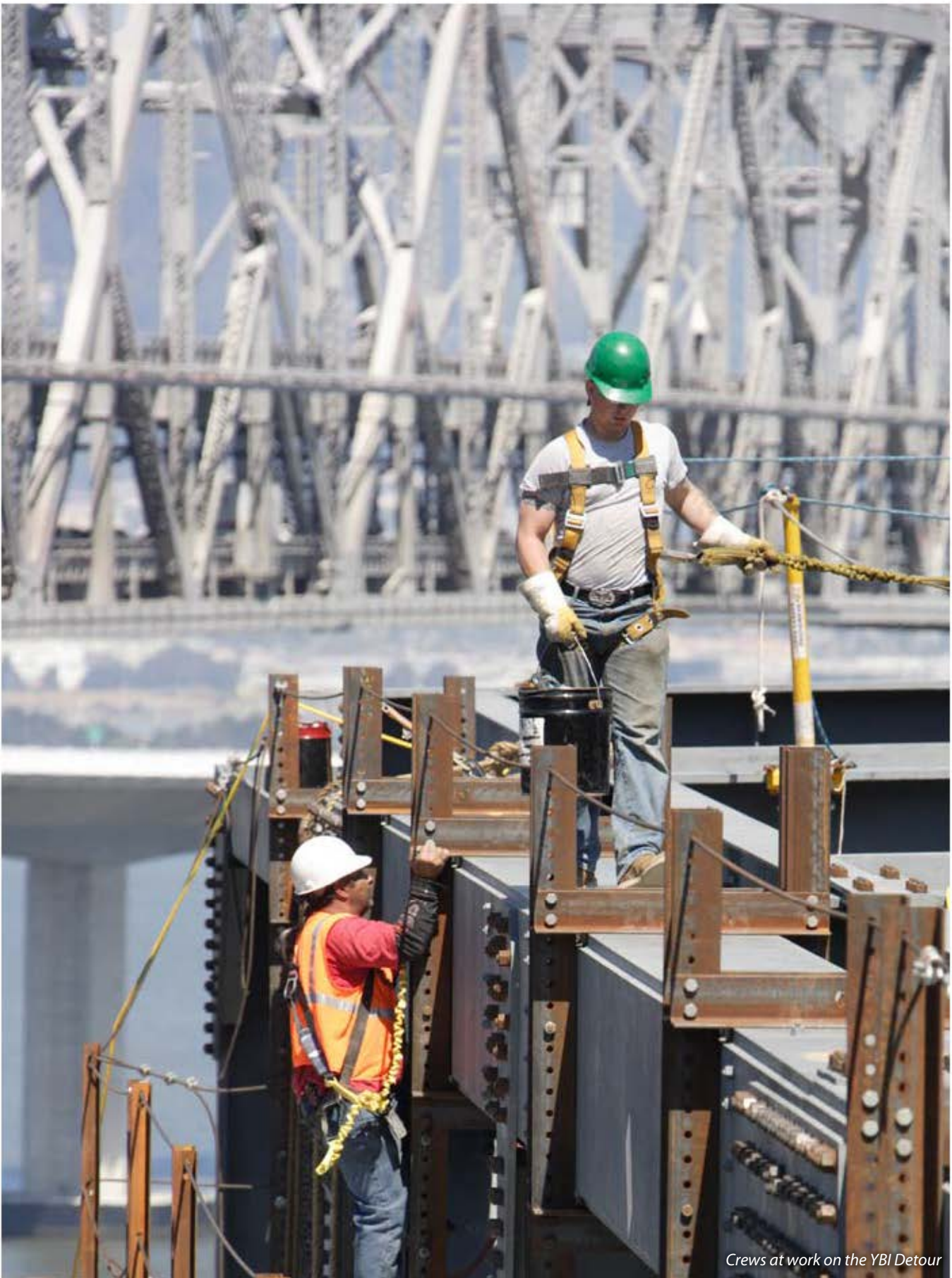
The coming year will be the busiest yet for the Seismic Retrofit Projects. The TBPOC and the numerous teams involved will focus on the milestones for 2009, making sure that progress contributes to the overall project coming in on budget and on schedule. The major focus in 2009 will be on the SAS, as well as the YBITS and temporary detour. Below are some of the major milestones anticipated in 2009:



Antioch Bridge



Dumbarton Bridge



Crews at work on the YBI Detour



TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE

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2009 LOOK AHEAD

SAN FRANCISCO-OAKLAND BAY BRIDGE

- The first **steel shipments from China** for the SAS will arrive, as will the shear leg crane barge that will lift the SAS deck segments into place.
- Construction of the **temporary supports for the SAS** will continue throughout the year, while work on the main SAS structure will begin.
- **A full closure of the Bay Bridge** will be necessary to shift traffic onto the temporary detour at Yerba Buena Island so construction of the Yerba Buena Island Transition Structure's mainline can begin. Work on the SAS' main structure will begin.
- Work on the **Oakland Touchdown** westbound roadway will be complete, allowing the SAS contractor to access the Skyway to work on the SAS.
- The **West Approach** will be complete in February as the final westbound and eastbound roadway alignments open to traffic, and the **Harrison Street off-ramp reopens**.
- **YBITS Contract #1** will go out to bid in mid-2009. The contract will build the mainline structure that transitions the parallel decks of the SAS to the upper and lower decks to the YBI tunnel. Work on the remaining **YBITS foundations** will take place in 2009.
- To support outreach efforts, **BayBridge360** will continue to add new videos and photo slideshows through the year.
- The **Small Business Program** will implement the training program developed in 2008, which will enhance small businesses' ability to bid on East Span projects. The program will also host another YBITS outreach event in the spring.

BENICIA-MARTINEZ BRIDGE

The reconfiguration of the original bridge into four southbound lanes with shoulders is expected to be completed in 2009. Work will include replacing the joints and damaged deck on the original southbound lanes while southbound traffic uses the original northbound lanes. Crews will also fix the roadway undulation just south of the bridge on southbound Interstate 680, and finish elevating nearby Marina Vista Road.

DUMBARTON AND ANTIOCH BRIDGES

Design and construction plans, and cost estimates for both bridges are expected to be ready in August 2009. Final regulatory agency permits are expected to be obtained in September 2009.

APPENDIX A

Table 1: Toll Bridge Program Funding (as of September 30, 2008)

	Budgeted (In \$ Millions)	Funding Available & Contributions (In \$ Millions)
Toll Financing		
Seismic Surcharge Revenue AB 1171	\$ 2,282.0	\$ 2,282.0
Seismic Surcharge Revenue AB 144	2,150.0	\$ 2,150.0
BATA Consolidation	\$ 820.0	\$ 820.0
Subtotal—Financing	\$ 5,252.0	\$ 5,252.0
Direct Contribution		
Proposition 192	\$ 790.0	\$ 789.0
San Diego Coronado Toll Bridge Revenue Fund	\$ 33.0	\$ 33.0
Vincent Thomas Bridge	\$ 15.0	\$ 6.9
State Highway Account	\$ 745.0	\$ 745.0
Public Transportation Account	\$ 130.0	\$ 130.0
ITIP/SHOPP/Federal Contingency	\$ 448.0	-
Federal Highway Bridge Replacement and Rehabilitation (HBI)	\$ 642.0	\$ 642.0
SHA – East Span Demolition	\$ 300.0	-
SHA – “Efficiency Savings”	\$ 130.0	\$ 10.0
Redirect Spillover	\$ 125.0	\$ 125.0
Motor Vehicle Account	\$ 75.0	\$ 75.0
Subtotal—Contributions	\$ 3,433.0	\$ 2,555.9
Total Funding	\$ 8,685.0	\$ 7,807.9
Allocated to Date		\$ 6,900.1
Remaining Unallocated		\$ 907.8

Source: Toll Bridge Seismic Retrofit Program Third Quarter Report, as of September 30, 2008, Toll Bridge Program Oversight Committee.



TOLL BRIDGE PROGRAM
OVERSIGHT COMMITTEE

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION

Table 2: Toll Bridge Program Approved Budget (as of September 30, 2008)

Contracts	AB 144/SB 66 Budget (in \$ Millions)	Current Approved Budget (in \$ Millions)
Completed Projects		
Benicia-Martinez	\$177.8	\$177.8
Carquinez	\$114.2	\$114.2
San Mateo-Hayward	\$163.5	\$163.5
Vincent Thomas	\$58.5	\$58.5
San Diego-Coronado	\$103.5	\$103.5
Bay Bridge West Span	\$307.9	\$307.9
Richmond-San Rafael	\$914.0	\$816.5
Ongoing Projects		
Bay Bridge West Approach	\$429.0	\$453.7
Bay Bridge East Span	\$5,486.6	\$5,702.1
Miscellaneous Program Costs	\$30.0	\$30.0
Subtotal—Completed and Ongoing Projects	\$7,785.0	\$7,972.7
Program Contingency	\$900.0	\$757.3
Total Program	\$8,685.0	\$8,685.0

Source: Toll Bridge Seismic Retrofit Program Third Quarter Report, as of September 30, 2008, Toll Bridge Program Oversight Committee.

Special Thanks to the Prime Contractors and Designers

SAN FRANCISCO-OAKLAND BAY BRIDGE

Designers

T.Y. Lin International/Moffatt & Nichol (a joint venture)
PB America, Inc.

West Approach

Tutor-Saliba Corporation

Yerba Buena Island Detour

C.C. Myers, Inc.

Self-Anchored Suspension Span

ABF, a joint venture consisting of the
American Bridge Company and Fluor Enterprises, Inc.

E2/T1 and Skyway

KFM, a joint venture of Kiewit Pacific Company,
FCI Constructors, Inc. and Manson Construction Co.

Oakland Touchdown #1

MCM Construction, Inc.

Stormwater Control Project

Diablo Construction

BENICIA-MARTINEZ BRIDGE

ACC Construction
Top Grade Construction





Credits

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TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE

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TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION

ITEM 4: PROGRAM ISSUES

c. Partnership with Google

Memorandum

TO: Toll Bridge Program Oversight Committee (TBPOC) **DATE:** January 26, 2009

FR: Bart Ney, Public Information Officer, Caltrans

RE: Agenda No. - 4c

Item- Program Issues

Partnership with Google

Recommendation:

For Information Only

Cost:

N/A

Schedule Impacts:

N/A

Discussion:

The San Francisco-Oakland Bay Bridge is the first construction project to be featured on Google Earth. The program allows users to view satellite images, maps, terrain, and 3D images around the world. This now includes the new East Span of the Bay Bridge, and the progress being made on the bridge's seismic safety retrofit projects. The solid sections of the bridge are already complete, while the transparent sections are under construction, and we will continue to update the model as the construction progresses. Viewers can explore the bridge from any angle or position on Google Earth. The Public Information Team plans to use this tool to further educate the public about the bridge, as well as inform the public about upcoming milestones, such as this year's bridge closure.

Attachment(s):

N/A

**ITEM 5: SAN FRANCISCO-OAKLAND BAY
BRIDGE UPDATES**

- a. Yerba Buena Island Detour (YBID) Update

Memorandum

TO: Toll Bridge Program Oversight Committee (TBPOC) **DATE:** January 26, 2009

FR: Tony Anziano, Toll Bridge Program Manager, Caltrans

RE: Agenda No. - 5a

Item- San Francisco-Oakland Bay Bridge Updates
Yerba Buena Island Detour (YBID) Update

Recommendation:

For Information Only

Cost:

N/A

Schedule Impacts:

N/A

Discussion:

A verbal update on the status of the Yerba Buena Island Detour (YBID) contract will be provided at the meeting.

Attachment(s):

N/A

ITEM 5: SAN FRANCISCO-OAKLAND BAY BRIDGE UPDATES

b. Self-Anchored Suspension (SAS)
Superstructure

1) TBPOC/ABF Mitigation and Acceleration
Update

TO: Toll Bridge Program Oversight Committee **DATE:** January 26, 2009
(TBPOC)

FR: Andrew Fremier, Deputy Executive Director, BATA

RE: Agenda No. - 5b1
Item- San Francisco-Oakland Bay Bridge Updates
TBPOC/ABF Mitigation and Acceleration Update

Recommendation:

For Information Only

Cost Impacts:

TBD

Schedule Impacts:

TBD

Discussion:

The following is an update on the topics discussed at the December 2008 TBPOC/ABF Partnering Session.

1. **Design Build** – ABF suggested that a closer working relationship, similar to a design/build type of contract, with the Department and TYLin could facilitate and accelerate resolution of design/shop drawing/fabrication questions on the project.

Status: **OPEN**

TYLin is committed to partnering and working more closely with ABF, but there remain some outstanding liability issues that need to be resolved. While the Department has already taken steps to include an indemnity specification in all current and future construction contracts, the issue of liability insurance and liability caps remain to be resolved. These issues could be points of negotiation with TYLin to further project partnering.

2. **ZPMC Mitigation Proposal** – ABF has negotiated a schedule mitigation proposal to accelerate shipments of the bridge components. The estimated cost of this proposal is not-to-exceed \$26 million for 6 months of acceleration. The proposal has both

incentive and disincentive components. TBPOC and ABF management agreed to fund the proposal at a 50/50 split.

Status: **OPEN**

The schedule mitigation CCO between ZPMC and ABF was approved on January 19, 2009. Caltrans will request final TBPOC approval of the proposal based on the 50/50 split commitment as part of the larger settlement. An updated fabrication progress diagram will be presented to the TBPOC.

3. **Resolution of Known Fabrication Impacts** – Department and ABF staff identified a number of known fabrication changes that have impact fabrication of the bridge. It was discussed to resolve as many known issues as possible with a broad-brush evaluation to determine entitlement and impact.

Status: **OPEN**

The Department, lead by Mike Forner, continues to meet daily with ABF to discuss the proposal settlement. The challenge to getting to reaching resolution continues to be the determination of time impacts and TRO costs for the project. Both parties hope to bring at least an outline to reaching a settlement proposal to the February 4, 2009 TBPOC meeting.

4. **Updated Core Meetings** – To improve the project's working relationship, the monthly Core meeting between ABF and PMT management staffs will be revamped to focus on the identification and proactive resolution of project issues.

Status: **OPEN**

Joint Department and ABF teams have been established to develop a Joint Opportunity Schedule and to focus on accelerating the east end of the SAS. The Joint Opportunity Schedule Team plans to report to the TPBOC/ABF board in April on their work. The East End Team continues to focus on the development and approval of shop drawing work for the east end of the SAS.

5. **Project Acceleration** – BATA staff is requesting that TBPOC task the PMT to look at more bold action to engage ABF in acceleration discussions, beyond the resolution of known fabrication impacts, and the adoption of the Joint Opportunity Schedule.

Items that could be examined include:

- Gutting and amending the current CPM specification
- Agreement on an appropriate schedule
- Additional incentives
- Modifications to the Liquidated Damages specification

Attachment(s)

ITEM 5: SAN FRANCISCO-OAKLAND BAY BRIDGE UPDATES

b. Self-Anchored Suspension (SAS)
Superstructure

2) Contract Change Orders (CCO's)

a) SAS – CCO 77, S1 (Green-Tagging Process)

Memorandum

TO: Toll Bridge Program Oversight Committee (TBPOC) **DATE:** January 26, 2009

FR: Tony Anziano, Toll Bridge Program Manager, Caltrans

RE: Agenda No. - 5b2a

Item- San Francisco-Oakland Bay Bridge Updates
Self Anchored Suspension (SAS) Superstructure
Contract Change Orders (CCO's), CCO 77, S1

Recommendation:
APPROVAL

Cost:
CCO 77 - Supplemental 1: \$8,100,000.00

Schedule Impacts:
N/A

Discussion:

At the November 6, 2008, TBPOC meeting, the Department requested approval for CCO 77 in the amount of \$8,646,633 to cover the green-tagging procedure and implementation of an electronic database, part of improvements to the Quality Assurance process. The original CCO 77 request was for the first year of implementation. Acknowledging green-tagging is one step in the overall acceleration strategy, the TBPOC approved a modified CCO 77 in the amount of \$4 million to cover costs incurred by the contractor for a six month period. Contract Change Order 77 - Supplemental 1 in the amount of \$8,100,000 covers green-tagging through fabrication completion.

Attachment(s):

1. Draft CCO 77 S1
2. Draft CCO 77 S1 Memorandum
3. OBG Overall Summary

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO: 77 Suppl. No. 1 Contract No. 04 – 0120F4 Road SF-80-13.2/13.9 FED. AID LOC.:

To: **AMERICAN BRIDGE/FLUOR ENTERPRISES INC A JOINT VENTURE**

You are directed to make the following changes from the plans and specifications or do the following described work not included in the plans and specifications for this contract. **NOTE: This change order is not effective until approved by the Engineer.**

Description of work to be done, estimate of quantities and prices to be paid. (Segregate between additional work at contract price, agreed price and force account.) Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. This last percentage shown is the net accumulated increase or decrease from the original quantity in the Engineer's Estimate

This supplemental change order provides additional funds for Quality Assurance (QA) improvements for the Orthotropic Box Girder (OBG), and Tower assemblies. Funds are also provided for electronic version of QA database and other related work.

Extra Work at Agreed Unit Price:

Provide additional funds for the continued implementation of the Quality Assurance improvements:

The following mutually agreed, all-inclusive monthly unit rates include straight time and overtime and constitute full compensation for the work, including all markups. The all-inclusive mutually agreed monthly unit rate will be paid for all staff that work 50% or more of the calendar days and are dedicated to the extra work described. The agreed unit prices are based on an exchange rate of 6.800 RMB/USD. No adjustment in compensation will be made for exchange rates that vary by less than 0.300 RMB/USD, i.e., between 6.500 RMB/USD and 7.100 RMB/USD. Should the exchange rate vary by more than 0.300 RMB/USD, a lump sum adjustment in compensation, increase or decrease, will be made at the end of the completion of the work described in this CCO. The adjustment will be based on the variations between 6.800 RMB/USD and the actual exchange rate paid in excess of 0.300 RMB/USD.

Description	Agreed Monthly Unit Rate in RMB's	Estimated Monthly Unit Rate in USD	Estimated Man-months	Estimated Total
1. Data Processing & Input by Local Consultants	46,152	\$ 6,787	242	\$1,680,000
2. Data Processing & Input by Fabricator (ZPMC)	31,198	\$ 4,588	418	\$1,920,000
3. Data Collection & Green Tagging Inspectors	62,662	\$ 9,215	347	\$3,200,000
4. Contractor Inspectors and Oversight Personnel	NA	\$ 16,937	71	\$1,200,000
Total Estimated Extra Work at Agreed Unit Price (22 Month Period, approx. through Nov. 2010)				\$8,000,000

The Contractor must submit a monthly log of the additional labor force dedicated for the implementation of this contract change order. The log shall include the individual's name, labor description category, and days worked. A representative of the Contractor and a representative of the Department shall sign the monthly log prior to submittal for payment. This extra work at agreed unit price has been estimated for an additional duration of twenty two (22) months, agreed prices and estimated units will be reevaluated with issuance of supplemental change order at the Contractor or Departments request.

Estimated Extra Work at Agreed Unit Price \$ 8,000,000.00

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO: 77 Suppl. No. 0 Contract No. 04 – 0120F4 Road SF-80-13.2/13.9 FED. AID LOC.:

Extra Work at Force Account:

Provide software and data, used and generated by this change, and additional support as directed by the Engineer.

Additional work will include, but will not be limited to the following:

1. All data in a read only format.
2. Database software with full front-end capable of printing data with no restrictions and unlimited time and users.

Labor, equipment and material authorized by the Engineer, as necessary, will be paid in accordance with the provisions of Section 4-1.03D, "Extra Work" of the Standard Specifications and Section 5-1.24, "Force Account Payment" of the Special Provisions.

Extra Work at Force Account.....\$ 100,000.00

Estimated Cost: Increase ☒ Decrease ☐ \$8,100,000.00

By reason of this order the time of completion will be adjusted as follows: 0 days

Submitted by

Signature	Resident Engineer	
	Darryl Schram for Gary Pursell, Sup.T.E.	Date

Approval Recommended by

Signature	Supervising Transportation Engineer	
	Gary Pursell, Sup.T.E.	Date

Engineer Approval by

Signature	Principal Transportation Engineer	
	Peter Siegenthaler, Prin.T.E.	Date

We the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment therefor the prices shown above.

NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specifications as to proceeding with the ordered work and filing a written protest within the time therein specified.

Contractor Acceptance by

Signature	(Print name and title)	Date

CONTRACT CHANGE ORDER MEMORANDUM

DATE: 12/08/2008

Page 1 of 2

DC-CEM-4903 (OLD HC-39 REV. 6/93) CT# 7541-3544-0

TO Pete Siegenthaler, Principal TE			FILE 04-0120F4	
FROM Gary Pursell, STE / Richard Morrow, SBE			04-SF-80-13.2/13.9	
CCO NO. 77	SUPPLEMENT NO. 1	CATEGORY CODE C-H-S-A	CONTINGENCY BALANCE (including this change)	
\$8,000,000.00			HEADQUARTERS APPROVAL REQUIRED?	
INCREASE <input checked="" type="checkbox"/> DECREASE <input type="checkbox"/>			YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	
SUPPLEMENTAL FUNDS PROVIDED \$			IS THIS REQUEST IN ACCORDANCE WITH ENVIRONMENTAL DOCUMENTS?	
			YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	
CCO DESCRIPTION: Welding Reports and Green Tags			PROJECT DESCRIPTION CONSTRUCT SELF-ANCHORED SUSPENSION BRIDGE	
Original Contract Time 2490 Day(s)	Time Adj.: This Change 0 Day(s)	Previously Approved CCO Time Adjustments 30 Day(s)	Percentage Time Adjusted: (including this change) 0 %	Total # of Unreconciled Deferred Time CCO(s): (including this change) 2

THIS CHANGE ORDER PROVIDES FOR:

Additional funding for Quality Assurance (QA) improvements for the Orthotropic Box Girder (OBG), and Tower assemblies. Funding is also provided for an electronic version of QA database and other related work as directed by the Engineer.

The original change order work was estimated for six months with the exception being the agreed lump sum items. It was anticipated that this change would be re-evaluated to determine funding needs and/or modifications needed to continue the improved QA process. Using the measured-mile estimating approach it has been estimated that an additional \$8,000,000.00 will fund the extra work at agreed unit price portion of this change through fabrication completion. Resources required to perform this work vary, which may require the Department to re-value this change before fabrication completion.

This change also provides provisions for preserving the electronic database data generated by this change. It is anticipated that the Quality Assurance Data being gathered will need to be accessed after fabrication completion. Preserving a fully functional electronic version of the database will enable Department personnel to sort and print all the data elements after fabrication and project completion. This tool will greatly enhance the Departments abilities to create meaningful reports from millions of data elements. Additional required support, to be approved and directed by the Engineer, will also needed to support this change. This extra work at force account is estimated at \$100,000.00.

This supplemental change is estimated to total \$8,100,00.00, which can be financed from the contingency fund. This will result in a cumulative amount of \$12,099,324.00 for this change order. A detailed cost estimate is on file.

The Contractor and the Department mutually agree that this change does not warrant a time adjustment, as it does not affect the controlling operation.

This change order has concurrence from Gary Pursell (Resident Engineer), Rick Morrow (Sup. Structure Rep), Patrick Lowry (METS), Ken Terpstra (Project Manager), Pete Siegenthaler (Principal TE), Mike Forner (Principal TE) and Marwan Nader (Project Engineer). Design and Maintenance concurrences are not required for this change. TBPOC concurrence is required for this change order.

The Resident Engineer requests this change order be approved with the condition that TBPOC approval is obtained prior to performing this extra work.

CONTRACT CHANGE ORDER MEMORANDUM

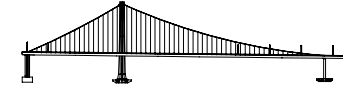
DATE: 12/08/2008

Page 2 of 2

DC-CEM-4903 (OLD HC-39 REV. 6/93) CT# 7541-3544-0

CONCURRED BY:		ESTIMATE OF COST	
CONSTRUCTION ENGINEER	DATE	THIS REQUEST	TOTAL TO DATE
Res. Eng. Gary Pursell, Sup. TE	1/08/09		
SR. BRIDGE ENGINEER	DATE	ITEMS	\$0.00
Struct. Rep. Rick Morrow, Sup. TE	1/08/09	FORCE ACCOUNT	\$100,000.00
FHWA REPRESENTATIVE	DATE	AGREED PRICE	\$8,000,000.00
		ADJUSTMENT	\$0.00
PROJECT MANAGER	DATE	TOTAL	\$12,099,324.00
Proj. Manager, Ken Terpstra			\$12,099,324.00
OTHER (SPECIFY)	DATE	FEDERAL PARTICIPATION	
TBPOC	11/06/08	<input type="checkbox"/> PARTICIPATING <input type="checkbox"/> PARTICIPATING IN PART <input checked="" type="checkbox"/> NONE <input type="checkbox"/> NON-PARTICIPATING (MAINTENANCE) <input type="checkbox"/> NON-PARTICIPATING	
Project Engineer, Marwan Nader	DATE	FEDERAL SEGREGATION (IF MORE THAN ONE FUNDING SOURCE OR P.I.P. TYPE)	
DISTRICT PRIOR APPROVAL BY	12/02/08	<input type="checkbox"/> CCO FUNDED PER CONTRACT <input type="checkbox"/> CCO FUNDED AS FOLLOWS	
	DATE	FEDERAL FUNDING SOURCE	PERCENT
HQ (ISSUE & APPROVE) (TO PROCEED) BY	DATE		
Bob Molera	12/4/08		
RESIDENT ENGINEER SIGNATURE	DATE		

OBG Overall Summary.



Week:- **13th Dec. to 19th Dec. 2008.**

Item	Total	Welded	This week	Green Tagged	%	This week	Production Rate	Start Date	End Date	Production Day's
SP (C4, C5, E7, E8)		592	0	351	59%	0	1.5	11/7/2007	12/19/2008	408
BP (D6)		159	13	93	58%	10	0.4	11/4/2007	12/19/2008	411
EP (B3, F9)		168	0	80	48%	1	0.7	4/10/2008	12/19/2008	253
DP (A2, A10)		84	4	55	65%	6	0.4	6/14/2008	12/19/2008	188
DP (A1)		504	9	131	26%	0	1.6	2/16/2008	12/19/2008	307
FL1 and FL3 (without Crossbeam)		220	0	81	37%	1	0.5	11/10/2007	12/19/2008	405
FL2 (Upper and Lower)		280	0	18	6%	8	0.7	11/10/2007	12/19/2008	405
FL3 (with Crossbeam)		54	2	15	28%	3	0.1	12/10/2007	12/19/2008	375
LD		186	20	95	51%	2	0.8	5/8/2008	12/19/2008	225
CB Panels		57	40	21	37%	12	3.8	12/4/2008	12/19/2008	15

ITEM 5: SAN FRANCISCO-OAKLAND BAY BRIDGE UPDATES

b. Self-Anchored Suspension (SAS)
Superstructure

- 2) Contract Change Orders (CCO's)
- b) SAS – CCO 91, S1 (Additional NDT)

Memorandum

TO: Toll Bridge Program Oversight Committee (TBPOC) **DATE:** January 26, 2009

FR: Tony Anziano, Toll Bridge Program Manager, Caltrans

RE: Agenda No. - 5b2b

Item- San Francisco-Oakland Bay Bridge Updates
Self Anchored Suspension (SAS) Superstructure
Contract Change Orders (CCO's), CCO 91, S1

Recommendation:
APPROVAL

Cost:
CCO 91 - Supplemental 1: \$2,500,000.00

Schedule Impacts:
N/A

Discussion:

Contract Change Order 91 - Supplemental 1 in the amount of \$2,500,000 is needed to pay for additional non-destructive testing (NDT) work. The original estimate for NDTs was \$900,000. The NDTs were to be done on a smaller number of U-ribs. After much deliberation, it was decided to increase the number of U-ribs to be tested as well as to add testing on tower sections, stiffeners, and bolts. The \$2,500,000 for CCO 91 Supplement 1 covers the estimated total cost of the required non-destructive testing, including the original \$900,000 approved under CCO 91 October 7, 2008.

Attachment(s):

1. Draft CCO 91 S1
2. Draft CCO 91 S1 Memorandum
3. Approved CCO 91

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO: 91 Suppl. No. 1 Contract No. 04 – 0120F4 Road SF-80-13.2/13.9 FED. AID LOC.:

To: **AMERICAN BRIDGE/FLUOR ENTERPRISES INC A JOINT VENTURE**

You are directed to make the following changes from the plans and specifications or do the following described work not included in the plans and specifications for this contract.

NOTE: This change order is not effective until approved by the Engineer.

Description of work to be done, estimate of quantities and prices to be paid. (Segregate between additional work at contract price, agreed price and force account.) Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. This last percentage shown is the net accumulated increase or decrease from the original quantity in the Engineer's Estimate.

Extra Work at Force Account:

Provide additional funds.

Estimated Cost of Extra Work at Force Account.....\$1,600,000.00

Consideration of a time adjustment will be deferred until completion of the work specified herein. Determination of a commensurate time adjustment will be made in accordance with Section 10-1.13, "PROGRESS SCHEDULE (CRITICAL PATH METHOD)" and Section 10-1.14, "TIME-RELATED OVERHEAD" of the Special Provisions, as well as Section 8-1.07, "LIQUIDATED DAMAGES", of the Standard Specifications.

Estimated Cost: Increase ☒ Decrease ☐ \$1,600,000.00

By reason of this order the time of completion will be adjusted as follows: DEFERRED

Submitted by

Signature	Resident Engineer	Gary Pursell, Sup.T.E.	Date
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Approval Recommended by

Signature	Supervising Bridge Engineer	Richard Morrow, Sup.T.E.	Date
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Engineer Approval by

Signature	Supervising Transportation Engineer	Michael Forner, Prin.T.E.	Date
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We the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment therefor the prices shown above.

NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specifications as to proceeding with the ordered work and filing a written protest within the time therein specified.

Contractor Acceptance by

Signature	(Print name and title)	Date
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CONTRACT CHANGE ORDER MEMORANDUM

DATE: 12/02/2008

Page 1 of 1

DC-CEM-4903 (OLD HC-39 REV. 6/93) CT# 7541-3544-0

TO Pete Siegenthaler, Principal TE			FILE 04-0120F4	
FROM Gary Pursell, STE / Richard Morrow, SBE			04-SF-80-13.2/13.9	
CCO NO. 91	SUPPLEMENT NO. 1	CATEGORY CODE CHSA	CONTINGENCY BALANCE (including this change) \$124,135,313.40	
			HEADQUARTERS APPROVAL REQUIRED?	
\$1,600,000.00			INCREASE <input checked="" type="checkbox"/> DECR <input type="checkbox"/>	
SUPPLEMENTAL FUNDS PROVIDED \$ 175,000.00			<div style="border: 1px solid black; padding: 10px; text-align: center;"> DRAFT CCO 091S1 - CCO Memo v02 20090108.doc </div>	
CCO DESCRIPTION: Additional Non-Destructive Testing (NDT)				
CONSTRUCT SELF-ANCHORED SUSPENSION BRIDGE			YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	
Original Contract Time 2490 Day(s)			Time Adj.: This Change 0 Day(s)	
Previously Approved CCO Time Adjustments 30 Day(s)			Percentage Time Adjusted: (including this change) 1 %	
Total # of Unreconciled Deferred Time CCO(s): (including this change) 5				

THIS CHANGE ORDER PROVIDES FOR:

Providing additional funds to perform additional Non-Destructive Testing (NDT) as directed by the Engineer in accordance with Section 8-3.01, "Welding," of the Special Provisions. Additional NDT work includes, but will not be limited to the following:

1. Performing Magnetic Particle Testing (MT) as directed by the Engineer.
2. Procuring steel panels for additional weld testing as directed by the Engineer.
3. Providing ultrasonic and phased array testing as directed by the Engineer.
4. Providing additional testing materials, equipment, labor, and services as directed by the Engineer.

This change provides necessary additional fabrication support, materials, equipment, labor, services, and field equipment for the Engineer's to perform additional NDT at fabrication facilities in China and other fabrication locations, if warranted. After reviewing current extra work bills on tests due to greater than anticipated NDT on U-ribs, it was determined additional funding will be necessary. In addition, the Department would like to perform NDT tests on tower sections, stiffeners and bolts not in the original estimate.

The Special Provisions contemplated this extra work and Supplemental Funds in the amount of \$1,075,000.00 are provided for additional Non-Destructive Testing. This work is not covered by any contract items. Therefore, payment for this work will be at Extra Work at Force Account for an estimated cost of \$1,600,000.00. This will result in a cumulative amount of \$2,500,000.00 for this change order. Copies of this extra work will be placed in the project files.

Adjustment of contract time is deferred pending completion of the work specified in this change as it may affect the controlling operation.

Design and Maintenance concurrence is not required since this change is addressed in the Special Provisions. TBPOC concurrence is required for this change order.

The Resident Engineer requests this change order be approved with the condition that TBPOC approval is obtained prior to performing this extra work.

CONCURRED BY:		ESTIMATE OF COST	
CONSTRUCTION ENGINEER Res. Eng. Gary Pursell, Sup. TE	DATE	THIS REQUEST	TOTAL TO DATE
SR. BRIDGE ENGINEER Struct. Rep. Rick Morrow, Sup. TE	DATE	ITEMS	\$0.00
FHWA REPRESENTATIVE	DATE	FORCE ACCOUNT	\$1,600,000.00
		AGREED PRICE	\$0.00
		ADJUSTMENT	\$0.00
PROJECT MANAGER Proj. Manager, Ken Terpstra	DATE	TOTAL	\$1,600,000.00
OTHER (SPECIFY) PCE, Mike Forener, Prin TE	DATE	FEDERAL PARTICIPATION	
		<input type="checkbox"/> PARTICIPATING <input type="checkbox"/> PARTICIPATING IN PART <input checked="" type="checkbox"/> NONE <input type="checkbox"/> NON-PARTICIPATING (MAINTENANCE) <input type="checkbox"/> NON-PARTICIPATING	
TBPCO	DATE	FEDERAL SEGREGATION (IF MORE THAN ONE FUNDING SOURCE OR P.I.P. TYPE)	
DISTRICT PRIOR APPROVAL BY	DATE	<input type="checkbox"/> CCO FUNDED PER CONTRACT <input type="checkbox"/> CCO FUNDED AS FOLLOWS	
HQ (ISSUE & APPROVE) (TO PROCEED) BY Required	DATE	FEDERAL FUNDING SOURCE	PERCENT
RESIDENT ENGINEER SIGNATURE	DATE		

For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 263-2041 or TDD (916) 263-2044 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

CONTRACT NO. 0 4 0 1 2 0 F 4 CCO NO. 9 1 SUPPL. 0 0 CONSTRUCTION DEPT. USE ONLY ☐ FUNCTION ☐ OVERRIDE

CARD TYPE 1		C. C. O. DESCRIPTION A D D I T I O N A L N O N - D E S T R U C T I V E T E S T I N G (N D T)	
NET \$ CHANGE THIS CCO		APPROVAL DATE	TIME EXTENSION DAYS
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<div style="border: 1px solid black; padding: 2px; text-align: center;"> CARD TYPE 5 </div> <div style="text-align: center; margin-top: 5px;">16</div>	FEDERAL PARTICIPATION <div style="border: 1px solid black; padding: 2px; text-align: center; margin: 10px auto; width: 30px;"> N </div> <div style="text-align: center; margin-top: 5px;">17</div>	IF PARTICIPATING IN PART (S), BREAKDOWN COST AS FOLLOWS: (INPUT TYPE AS P,M,N,R)	FEDERAL SEGREGATION (IF MORE THAN ONE FUNDING SOURCE) <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;"> <div style="border: 1px solid black; padding: 2px; width: 30px; height: 20px; margin: 0 auto;"></div> <div style="text-align: center; margin-top: 2px;">28</div> </div> <div> E = CCO to be funded as per contract </div> <div style="text-align: center;"> <div style="border: 1px solid black; padding: 2px; width: 30px; height: 20px; margin: 0 auto;"></div> <div style="text-align: center; margin-top: 2px;">29</div> </div> <div> F = CCO to be funded as follows: </div> </div>													
P = PARTICIPATING M = NON-PARTICIPATING (MAINTENANCE) N = NON-PARTICIPATING (OTHER THAN MAINTENANCE) R = NON-PARTICIPATING (REIMBURSEMENT BY OTHERS) S = PARTICIPATING IN PART	<table border="0" style="width: 100%;"> <tr> <th style="text-align: left; width: 10%;">TYPE</th> <th style="text-align: left; width: 10%;">COST</th> </tr> <tr> <td style="vertical-align: top;"> <div style="border: 1px solid black; padding: 2px; text-align: center; margin-bottom: 5px;"> 18 </div> </td> <td style="vertical-align: top;"> <div style="border-bottom: 1px solid black; position: relative; height: 20px; width: 100%;"> <div style="position: absolute; left: 0; bottom: 0; width: 10%; border-right: 1px solid black;"></div> <div style="position: absolute; left: 10%; bottom: 0; width: 10%; border-right: 1px solid black;"></div> <div style="position: absolute; left: 20%; bottom: 0; width: 10%; border-right: 1px solid black;"></div> <div style="position: absolute; left: 30%; bottom: 0; width: 10%; border-right: 1px solid black;"></div> <div style="position: absolute; 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GEORGE BOUGHOSN@DOT.CA.GOV

VERIFY

CONTRACT CHANGE ORDER MEMORANDUM

DATE: 10/7/2008 Page 1 of 1

TO: Mike Forner, Prin. TE / Gary Pursell, P.E., Sup T.E.		FILE: E.A. 04 - 0120F4	
FROM: Gary Pursell, P.E., Sup.T.E.		CO-RTE-PM SF-80-13.2/13.9	
CCO#: 91 SUPPLEMENT#: 0 Category Code: CHSA		FED. NO.	
COST: \$900,000.00 INCREASE <input checked="" type="checkbox"/> DECREASE <input type="checkbox"/>		CONTINGENCY BALANCE (incl. this change) \$134,066,258.40	
SUPPLEMENTAL FUNDS PROVIDED: \$900,000.00		HEADQUARTERS APPROVAL REQUIRED? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
CCO DESCRIPTION: Additional Non-Destructive Testing (NDT)		IS THIS REQUEST IN ACCORDANCE WITH ENVIRONMENTAL DOCUMENTS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
PROJECT DESCRIPTION: CONSTRUCT SELF-ANCHORED SUSPENSION BRIDGE			
Original Contract Time: 2490 Day(s)	Time Adj. This Change: DEF Day(s)	Previously Approved CCO Time Adjustments: 30 Day(s)	Percentage Time Adjusted: (including this change) 1 %
		Total # of Unreconciled Deferred Time CCO(s): (including this change) 2	

THIS CHANGE ORDER PROVIDES FOR:

Performing additional Non-Destructive Testing (NDT) as directed by the Engineer in accordance with Section 8-3.01, "Welding," of the Special Provisions. Additional NDT work includes, but will not be limited to the following:

1. Performing Magnetic Particle Testing (MT) as directed by the Engineer.
2. Procuring steel panels for additional weld testing as directed by the Engineer.
3. Providing ultrasonic and phased array testing as directed by the Engineer.
4. Providing additional testing materials, equipment, labor, and services as directed by the Engineer.


This change provides necessary additional fabrication support, materials, equipment, labor, services, and field equipment for the Engineer's to perform additional NDT at fabrication facilities in China and other fabrication locations, if warranted.

The Special Provisions contemplated this extra work and Supplemental Funds in the amount of \$1,075,000.00 are provided for additional Non-Destructive Testing. This work is not covered by any contract items. Therefore, payment for this work will be at Extra Work at Force Account for an estimated cost of \$900,000.00.

Adjustment of contract time is deferred pending completion of the work specified in this change as it may affect the controlling operation.

Design and Maintenance concurrence is not required since this change is addressed in the Special Provisions.

The Resident Engineer has approved this change order.

CONCURRED BY:				ESTIMATE OF COST		
Construction Engineer:	Res. Eng., Gary Pursell, Sup. TE	Date	9/4/08	ITEMS	THIS REQUEST	TOTAL TO DATE
Bridge Engineer:	Struct Rep, Rick Morrow, Sup TE	Date	9/4/08	FORCE ACCOUNT	\$0.00	\$0.00
Project Engineer:		Date		AGREED PRICE	\$900,000.00	\$900,000.00
Project Manager:	Proj Manager, Ken Terpstra	Date	10/7/08	ADJUSTMENT	\$0.00	\$0.00
FHWA Rep.:		Date		TOTAL	\$900,000.00	\$900,000.00
Environmental:		Date		FEDERAL PARTICIPATION		
Other (specify):	PCE, Pete Siegenthaler, Prin TE	Date	6/26/08	<input type="checkbox"/> PARTICIPATING <input type="checkbox"/> PARTICIPATING IN PART <input checked="" type="checkbox"/> NONE <input type="checkbox"/> NON-PARTICIPATING (MAINTENANCE) <input type="checkbox"/> NON-PARTICIPATING		
Other (specify):	PCE, Mike Forner, Prin TE	Date	9/4/08	FEDERAL SEGREGATION (if more than one Funding Source or P.I.P. type)		
District Prior Approval By:		Date		<input type="checkbox"/> CCO FUNDED PER CONTRACT <input type="checkbox"/> CCO FUNDED AS FOLLOWS		
HQ (Issue Approve) By:		Date		FEDERAL FUNDING SOURCE PERCENT		
Resident Engineer's Signature:				10/7/08		

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO 91	Suppl. No. 0	Contract No. 04 - 0120F4	Road SF-80-13.2/13.9	FED. AID LOC.:
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To: AMERICAN BRIDGE/FLUOR ENTERPRISES INC A JOINT VENT

You are directed to make the following changes from the plans and specifications or do the following described work not included in the plans and specifications for this contract. **NOTE: This change order is not effective until approved by the Engineer.**

Description of work to be done, estimate of quantities and prices to be paid. (Segregate between additional work at contract price, agreed price and force account.) Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. This last percentage shown is the net accumulated increase or decrease from the original quantity in the Engineer's Estimate.

Extra Work at Force Account:

Perform additional Non-Destructive Testing (NDT) as directed by the Engineer in accordance with Section 8-3.01, "Welding," of the Special Provisions.

Additional NDT work will include, but will not be limited to the following:

1. Performing Magnetic Particle Testing (MT) as directed by the Engineer.
2. Procuring steel panels for additional weld testing as directed by the Engineer.
3. Providing ultrasonic and phased array testing as directed by the Engineer.
4. Providing additional testing materials, equipment, labor, and services as directed by the Engineer.


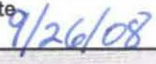
Labor, equipment and material authorized by the Engineer, as necessary, will be paid in accordance with the provisions of Section 4-1.03D, "Extra Work" of the Standard Specifications and Section 5-1.24, "Force Account Payment" of the Special Provisions.

Estimated cost of Extra Work at Force Account\$900,000.00


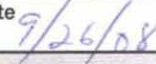
Estimated Cost: Increase ☒ Decrease ☐ \$900,000.00

By reason of this order the time of completion will be adjusted as follows: Deferred

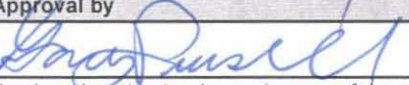
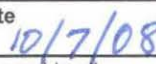
Submitted by

Signature 	Resident Engineer Gary Pursell, P.E., Sup.T.E.	Date 
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Approval Recommended by

Signature 	Supervising Bridge Engineer Richard Morrow, Sup. BE	Date 
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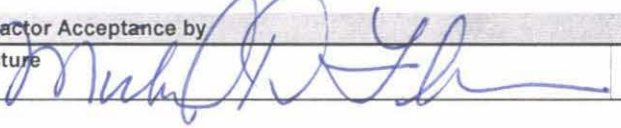
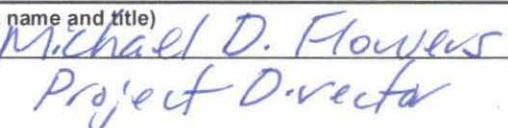
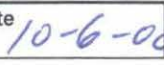
Engineer Approval by

Signature 	Principal Transportation Engineer Michael Forner, Prin. TE	Date 
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We the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as may otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment therefor the prices shown above.

NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specifications as to proceeding with the ordered work and filing a written protest within the time therein specified.

Contractor Acceptance by

Signature 	(Print name and title)  Michael D. Flowers Project Director	Date 
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ITEM 5: SAN FRANCISCO-OAKLAND BAY BRIDGE UPDATES

b. Self-Anchored Suspension (SAS)
Superstructure

3) Cable Fabrication/Installation Discussion

Memorandum

TO: Toll Bridge Program Oversight Committee (TBPOC) **DATE:** January 26, 2009

FR: Tony Anziano, Toll Bridge Program Manager, Caltrans

RE: Agenda No. - 5b3

Item- San Francisco-Oakland Bay Bridge Updates
Self-Anchored Suspension (SAS) Superstructure
Cable Fabrication/Installation Discussion

Recommendation:

For Information Only

Cost:

N/A

Schedule Impacts:

N/A

Discussion:

American Bridge/Fluor, Joint Venture (ABF) representatives will lead a discussion on the SAS cable fabrication and installation.

Attachment(s):

N/A

ITEM 6: OTHER BUSINESS

No Attachments